STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 198451

TO: Marcela Cordero Garcia
Location: REM/3A30/3C18
Art Unit: 1654
Monday, August 21, 2006

Case Serial Number: 10/627314

From: Paul Schulwitz
Location: Biotech-Chem Library
REM-1A65
Phone: 571-272-2527

Paul.schulwitz@uspto.gov

Search Notes

Examiner Cordero Garcia,

Please review the attached search results.
If you have any questions or if you would like to refine the search query, please feel free to contact me at any time.

Thank you for using STIC search services!

Paul Schulwitz
Technical Information Specialist
REM-1A65
571-272-2527

STIC-Biotech/ChemLib 19845

From: MARCELA CORDERO GARCIA [marcela.corderogarcia@uspto.gov]
Sent: Friday, August 11, 2006 4:04 PM
To: STIC-Biotech/ChemLib
Subject: Database Search Request, Serial Number: 10/627,314

Requester:
MARCELA CORDERO GARCIA (P/1654)
Art Unit:
GROUP ART UNIT 1654
Employee Number:
80381
Office Location:
REM 03A30
Phone Number:
(571)272-2939
Mailbox Number:
REM3C18

Case serial number:
10/627,314
Class / Subclass(es):
514/10
Earliest Priority Filing Date:
02/01/2001
Format preferred for results:
Paper
Search Topic Information:

Please also a composition comprising:
a) bone cement material
b) antimicrobial agent selected from KRKFHEKHHSHRGY (SEQ ID NO:1), KRLFKKLKFSLRKY (SEQ ID NO:2), KRLFKKLLFSLRKY (SEQ ID NO:3), LLLFLLKKRKKRKY (SEQ ID NO:4), FKCRRWQWRMKKLG (SEQ ID NO:5), GRRRRSVQWCA (SEQ ID NO:6) or SSSKEENRIIPGGI (SEQ ID NO: 7)
c) bone growth factor (including TGF beta superfamily)

Thanks, -- Marcela
Special Instructions and Other Comments:

****
Searcher:_____
Searcher Phone:_____
Date Searcher Picked up:_____
Date completed:_____
Searcher Prep Time:_____
Online Time:_____

****
Type of Search
NA#_____ AA#:_____
S/L:_____ Oligomer:_____
Encode/Transl:_____
Structure #:_____Text:____
Inventor:_____ Litigation:___

****
Vendors and cost where applicable
STN:_____
DIALOG:_____
QUESTEL/ORBIT:_____
LEXIS/NEXIS:_____
SEQUENCE SYSTEM:_____
WWW/Internet:_____
Other (Specify):_____

```
=> d 129 rn cn sql kwic nte lc 1-43

L29  ANSWER 1 OF 43  REGISTRY  COPYRIGHT 2006 ACS on STN
RN   896750-62-2  REGISTRY
CN   19: PN: US20060147442 SEQID: 19 unclaimed protein (9CI)  (CA INDEX NAME)
SQL  51

SEQ      1 MKFFVFALIL ALMLSMTGAD SHAKRHHGYK RKFHEKHHSH RGYRSNYLYD
                                           = ========== ===
HITS AT:   30-43

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
LC   STN Files:   CA, CAPLUS, USPATFULL

L29  ANSWER 2 OF 43  REGISTRY  COPYRIGHT 2006 ACS on STN
RN   887954-06-5  REGISTRY
CN   17: PN: WO2006054908 SEQID: 7 unclaimed protein (9CI)  (CA INDEX NAME)
SQL  280

SEQ      1 APRKNVRWCT ISQPEWFKCR RWQWRMKKLG APSITCVRRA FALECIRAIA
                          ==== ==========
HITS AT:   17-30
LC   STN Files:   CA, CAPLUS, TOXCENTER

L29  ANSWER 3 OF 43  REGISTRY  COPYRIGHT 2006 ACS on STN
RN   887954-05-4  REGISTRY
CN   16: PN: WO2006054908 SEQID: 6 unclaimed protein (9CI)  (CA INDEX NAME)
SQL  284

SEQ      1 APRKNVRWCT ISQPEWFKCR RWQWRMKKLG APSITCVRRA FALECIRAIA
                          ==== ==========
HITS AT:   17-30
LC   STN Files:   CA, CAPLUS, TOXCENTER

L29  ANSWER 4 OF 43  REGISTRY  COPYRIGHT 2006 ACS on STN
RN   887954-04-3  REGISTRY
CN   15: PN: WO2006054908 SEQID: 5 unclaimed protein (9CI)  (CA INDEX NAME)
SQL  333

SEQ      1 GRRRRSVQWC AVSQPEATKC FQWQRNMRKV RGPPVSCIKR DSPIQCIQAI
           ========== =
HITS AT:   1-11
LC   STN Files:   CA, CAPLUS, TOXCENTER

L29  ANSWER 5 OF 43  REGISTRY  COPYRIGHT 2006 ACS on STN
RN   887954-03-2  REGISTRY
CN   14: PN: WO2006054908 SEQID: 4 unclaimed protein (9CI)  (CA INDEX NAME)
SQL  692

SEQ      1 GRRRRSVQWC AVSQPEATKC FQWQRNMRKV RGPPVSCIKR DSPIQCIQAI
           ========== =
HITS AT:   1-11

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
LC   STN Files:   CA, CAPLUS, TOXCENTER

L29  ANSWER 6 OF 43  REGISTRY  COPYRIGHT 2006 ACS on STN
RN   887954-02-1  REGISTRY
```

CN 13: PN: WO2006054908 SEQID: 3 unclaimed protein (9CI) (CA INDEX NAME)
SQL 711

SEQ 1 MKLVFLVLLF LGALGLCLAG RRRRSVQWCA VSQPEATKCF QWQRNMRKVR
= ==========
HITS AT: 20-30

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, TOXCENTER

L29 ANSWER 7 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **887954-01-0** REGISTRY
CN 12: PN: WO2006054908 SEQID: 2 unclaimed protein (9CI) (CA INDEX NAME)
SQL 689

SEQ 1 APRKNVRWCT ISQPEWFKCR RWQWRMKKLG APSITCVRRA FALECIRAIA
==== ==========
HITS AT: 17-30

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, TOXCENTER

L29 ANSWER 8 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **887954-00-9** REGISTRY
CN 11: PN: WO2006054908 SEQID: 1 unclaimed protein (9CI) (CA INDEX NAME)
SQL 708

SEQ 1 MKLFVPALLS LGALGLCLAA PRKNVRWCTI SQPEWFKCRR WQWRMKKLGA
===== =========
HITS AT: 36-49

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, TOXCENTER

L29 ANSWER 9 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **887953-93-7** REGISTRY
CN 4: PN: WO2006054908 SEQID: 11 unclaimed protein (9CI) (CA INDEX NAME)
SQL 681

SEQ 1 CTISQPEWFK CRRWQWRMKK LGAPSITCVR RAFALECIRA IAEKKADAVT
== ========== ==
HITS AT: 9-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, TOXCENTER

L29 ANSWER 10 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **887953-92-6** REGISTRY
CN 3: PN: WO2006054908 SEQID: 10 unclaimed protein (9CI) (CA INDEX NAME)
SQL 344

SEQ 1 APRKNVRWCT ISQPEWFKCR RWQWRMKKLG APSITCVRRA FALECIRAIA
==== ==========
HITS AT: 17-30
LC STN Files: CA, CAPLUS, TOXCENTER

L29 ANSWER 11 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **887953-91-5** REGISTRY
CN 2: PN: WO2006054908 SEQID: 9 unclaimed protein (9CI) (CA INDEX NAME)

SQL 332

SEQ 1 APRKNVRWCT ISQPEWFKCR RWQWRMKKLG APSITCVRRA FALECIRAIA
==== ==========
HITS AT: 17-30
LC STN Files: CA, CAPLUS, TOXCENTER

L29 ANSWER 12 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **887953-90-4** REGISTRY
CN 1: PN: WO2006054908 SEQID: 8 unclaimed protein (9CI) (CA INDEX NAME)
SQL 281

SEQ 1 APRKNVRWCT ISQPEWFKCR RWQWRMKKLG APSITCVRRA FALECIRAIA
==== ==========
HITS AT: 17-30
LC STN Files: CA, CAPLUS, TOXCENTER

L29 ANSWER 13 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **886088-41-1** REGISTRY
CN 37: PN: WO2006047744 SEQID: 38 unclaimed protein (9CI) (CA INDEX NAME)
SQL 708

SEQ 1 MKLFVPALLS LGALGLCLAA PRKNVRWCTI SQPEWFKCRR WQWRMKKLGA
===== =========
HITS AT: 36-49

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

L29 ANSWER 14 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **886088-38-6** REGISTRY
CN 34: PN: WO2006047744 SEQID: 35 unclaimed protein (9CI) (CA INDEX NAME)
SQL 708

SEQ 1 MKLFVPALLS LGALGLCLAA PRKNVRWCTI SQPEWFKCRR WQWRMKKLGA
===== =========
HITS AT: 36-49
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

L29 ANSWER 15 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **886088-37-5** REGISTRY
CN 33: PN: WO2006047744 SEQID: 34 unclaimed protein (9CI) (CA INDEX NAME)
SQL 711

SEQ 1 MKLVFLVLLF LGALGLCLAG RRRRSVQWCA VSQPEATKCF QWQRNMRKVR
= ==========
HITS AT: 20-30

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

L29 ANSWER 16 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **886088-34-2** REGISTRY
CN 30: PN: WO2006047744 SEQID: 31 unclaimed protein (9CI) (CA INDEX NAME)
SQL 709

SEQ 1 LVFLVLLFLG ALGLCLAGRR RRSVQWCAVS QPEATKCFQW QRNMRKVRGP
=== ========
HITS AT: 18-28

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

L29 ANSWER 17 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **886088-33-1** REGISTRY
CN 28: PN: WO2006047744 SEQID: 29 unclaimed protein (9CI) (CA INDEX NAME)
SQL 708

SEQ 1 MKLFVPALLS LGALGLCLAA PRKNVRWCTI SQPEWFKCRR WQWRMKKLGA
===== =========
HITS AT: 36-49

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

L29 ANSWER 18 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **886088-31-9** REGISTRY
CN 26: PN: WO2006047744 SEQID: 27 unclaimed protein (9CI) (CA INDEX NAME)
SQL 711

SEQ 1 MKLVFLVLLF LGALGLCLAG RRRRSVQWCA VSQPEATKCF QWQRNMRKVR
= ==========
HITS AT: 20-30

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

L29 ANSWER 19 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **886088-26-2** REGISTRY
CN 21: PN: WO2006047744 SEQID: 22 unclaimed protein (9CI) (CA INDEX NAME)
SQL 708

SEQ 1 MKLFVPALLS LGALGLCLAA PRKNVRWCTI SQPEWFKCRR WQWRMKKLGA
===== =========
HITS AT: 36-49

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

L29 ANSWER 20 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **886088-22-8** REGISTRY
CN 15: PN: WO2006047744 SEQID: 16 unclaimed protein (9CI) (CA INDEX NAME)
SQL 708

SEQ 1 MKLFVPALLS LGALGLCLAA PRKNVRWCTI SQPEWFKCRR WQWRMKKLGA
===== =========
HITS AT: 36-49

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

L29 ANSWER 21 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **886088-21-7** REGISTRY
CN 14: PN: WO2006047744 SEQID: 15 unclaimed protein (9CI) (CA INDEX NAME)
SQL 711

SEQ 1 MKLVFLVLLF LGALGLCLAG RRRRSVQWCA VSQPEATKCF QWQRNMRKVR
= ==========

HITS AT: 20-30

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

L29 ANSWER 22 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **886088-19-3** REGISTRY
CN 12: PN: WO2006047744 SEQID: 13 unclaimed protein (9CI) (CA INDEX NAME)
SQL 681

SEQ 1 CTISQPEWFK CRRWQWRMKK LGAPSITCVR RAFALECIRA IAEKKADAVT
== ========== ==
HITS AT: 9-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

L29 ANSWER 23 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **724913-27-3** REGISTRY
CN Proteinase inhibitor, cystatin S (human) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 134: PN: WO2004063709 SEQID: 134 claimed protein
SQL . . .

SEQ 1 MARPLCTLLL LMATLAGALA SSSKEENRII PGGIYDADLN DEWVQRALHF
========== ====
HITS AT: 21-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, TOXCENTER

L29 ANSWER 24 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **627916-95-4** REGISTRY
CN 71: PN: WO03097854 SEQID: 69 unclaimed protein (9CI) (CA INDEX NAME)
SQL 711

SEQ 1 MKLVFLVLLF LGALGLCLAG RRRRSVQWCA VSQPEATKCF QWQRNMRKVR
= ==========
HITS AT: 20-30

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

L29 ANSWER 25 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **503571-74-2** REGISTRY
CN Tumor-associated protein TAT236 (human clone DNA225886 precursor) (9CI)
(CA INDEX NAME)
OTHER NAMES:
CN 77: PN: WO03024392 FIGURE: 77 claimed. . .

SEQ 1 MARPLCTLLL LMATLAGALA SSSKEENRII PGGIYDADLN DEWVQRALHF
========== ====
HITS AT: 21-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

L29 ANSWER 26 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **481510-83-2** REGISTRY

CN GenBank CAA38572 (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 18: PN: WO2006054908 PAGE: 27 claimed protein
CN GenBank CAA38572 (Translated from:. . .

SEQ 1 CTISQPEWFK CRRWQWRMKK LGAPSITCVR RAFALECIRA IAEKKADAVT
== ========== ==
HITS AT: 9-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, TOXCENTER

L29 ANSWER 27 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **255057-51-3** REGISTRY
CN 4: PN: WO0001427 PAGE: 2 unclaimed protein (9CI) (CA INDEX NAME)
SQL 29

SEQ 1 KRLFKKLKFS LRKYKRLFKK LKFSLRKYK
========== ========== ========
HITS AT: 1-28
LC STN Files: CA, CAPLUS

L29 ANSWER 28 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **255057-46-6** REGISTRY
CN 2: PN: WO0001427 PAGE: 2 unclaimed protein (9CI) (CA INDEX NAME)
SQL 29

SEQ 1 KRKFHEKHHS HRGYKRKFHE KHHSHRGYK
========== ========== ========
HITS AT: 1-28
LC STN Files: CA, CAPLUS

L29 ANSWER 29 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **255057-45-5** REGISTRY
CN 1: PN: WO0001427 PAGE: 5 unclaimed protein (9CI) (CA INDEX NAME)
SQL 30

SEQ 1 YGRHSHHKEH FKRKCCKRKF HEKHHSHRGY
==== ==========
HITS AT: 17-30
LC STN Files: CA, CAPLUS

L29 ANSWER 30 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **252209-80-6** REGISTRY
CN Glycine, L-phenylalanyl-L-lysyl-L-cysteinyl-L-arginyl-L-arginyl-L-tryptophyl-L-glutaminyl-L-tryptophyl-L-arginyl-L-methionyl-L-lysyl-L-lysyl-L-leucyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 25: PN: WO2005024002 SEQID: 56 unclaimed sequence
CN 5: PN: EP1228772 SEQID:. . .

SEQ 1 FKCRRWQWRM KKLG
========== ====
HITS AT: 1-14
LC STN Files: CA, CAPLUS, USPATFULL

L29 ANSWER 31 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **230974-92-2** REGISTRY
CN L-Tyrosine, L-leucyl-L-leucyl-L-leucyl-L-phenylalanyl-L-leucyl-L-leucyl-L-

lysyl-L-lysyl-L-arginyl-L-lysyl-L-lysyl-L-arginyl-L-lysyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 4: PN: EP1228772 SEQID: 4 claimed protein
CN 4: PN: EP1360961 SEQID:. . .

SEQ 1 LLLFLLKKRK KRKY
========== ====
HITS AT: 1-14
LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER, USPATFULL

L29 ANSWER 32 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **230974-91-1** REGISTRY
CN L-Tyrosine, L-lysyl-L-arginyl-L-leucyl-L-phenylalanyl-L-lysyl-L-lysyl-L-leucyl-L-lysyl-L-phenylalanyl-L-seryl-L-leucyl-L-arginyl-L-lysyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2: PN: EP1228772 SEQID: 2 claimed protein
CN 2: PN: EP1360961 SEQID:. . .

SEQ 1 KRLFKKLKFS LRKY
========== ====
HITS AT: 1-14
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

L29 ANSWER 33 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **223762-50-3** REGISTRY
CN L-Tyrosine, L-lysyl-L-arginyl-L-leucyl-L-phenylalanyl-L-lysyl-L-lysyl-L-leucyl-L-leucyl-L-phenylalanyl-L-seryl-L-leucyl-L-arginyl-L-lysyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 3: PN: EP1228772 SEQID: 3 claimed protein
CN 3: PN: EP1360961 SEQID:. . .

SEQ 1 KRLFKKLLFS LRKY
========== ====
HITS AT: 1-14
LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER, USPATFULL

L29 ANSWER 34 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **220126-74-9** REGISTRY
CN L-Isoleucine, L-seryl-L-seryl-L-seryl-L-lysyl-L-α-glutamyl-L-α-glutamyl-L-asparaginyl-L-arginyl-L-isoleucyl-L-isoleucyl-L-prolylglycylglycyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 7: PN: EP1228772 SEQID: 7 claimed protein
CN Cystatin S1-15
SQL 14

SEQ 1 SSSKEENRII PGGI
========== ====
HITS AT: 1-14
LC STN Files: CA, CAPLUS, USPATFULL

L29 ANSWER 35 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **183623-03-2** REGISTRY
CN L-Alanine, glycyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-seryl-L-valyl-L-glutaminyl-L-tryptophyl-L-cysteinyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:

CN L-Alanine, N-[N-[N-[N2-[N-[N-[N2-[N2-[N2-(N2-glycyl-L-arginyl)-L-arginyl]-L-arginyl]-L-arginyl]-L-seryl]-L-valyl]-L-glutaminyl]-L-tryptophyl]-L-cysteinyl]-
OTHER NAMES:
CN 16: PN: WO2005024002 SEQID: 46. . .

SEQ 1 GRRRRSVQWC A
========== =
HITS AT: 1-11
LC STN Files: CA, CAPLUS, PROUSDDR, TOXCENTER, USPATFULL

L29 ANSWER 36 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **170867-20-6** REGISTRY
CN L-Phenylalanine, L-phenylalanyl-L-lysyl-L-cysteinyl-L-arginyl-L-arginyl-L-tryptophyl-L-glutaminyl-L-tryptophyl-L-arginyl-L-methionyl-L-lysyl-L-lysyl-L-leucylglycyl-L-alanyl-L-prolyl-L-seryl-L-isoleucyl-L-threonyl-L-cysteinyl-L-valyl-L-arginyl-L-arginyl-L-alanyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 114: PN: WO0031279 TABLE: 1 unclaimed protein
CN 15: PN: US20060147442 SEQID:. . .

SEQ 1 FKCRRWQWRM KKLGAPSITC VRRAF
========== ====
HITS AT: 1-14

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

L29 ANSWER 37 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **155113-11-4** REGISTRY
CN L-Tyrosine, L-lysyl-L-arginyl-L-lysyl-L-phenylalanyl-L-histidyl-L-α-glutamyl-L-lysyl-L-histidyl-L-histidyl-L-seryl-L-histidyl-L-arginylglycyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Histatin 8 (human parotid saliva), N2-(N2-L-lysyl-L-arginyl)-
OTHER NAMES:
CN 1:. . .

SEQ 1 KRKFHEKHHS HRGY
========== ====
HITS AT: 1-14
LC STN Files: CA, CAPLUS, USPATFULL

L29 ANSWER 38 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **146897-68-9** REGISTRY
CN L-Phenylalanine, L-phenylalanyl-L-lysyl-L-cysteinyl-L-arginyl-L-arginyl-L-tryptophyl-L-glutaminyl-L-tryptophyl-L-arginyl-L-methionyl-L-lysyl-L-lysyl-L-leucylglycyl-L-alanyl-L-prolyl-L-seryl-L-isoleucyl-L-threonyl-L-cysteinyl-L-valyl-L-arginyl-L-arginyl-L-alanyl-, cyclic (3→20)-disulfide (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1H,16H-Pyrrolo[2,1-p][1,2,5,8,11,14,17,20,23,26,29,32,35,38,41,44,47,50,53]dithiaheptadecaazacyclohexapentacontine, cyclic peptide deriv.
CN Lactoferricin
CN Lactoferricin B
CN MONL 03

SEQ 1 FKCRRWQWRM KKLGAPSITC VRRAF
========== ====

HITS AT: 1-14

RELATED SEQUENCES AVAILABLE WITH SEQLINK
NTE

type	------ location ------	description
bridge	Cys-3 - Cys-20	disulfide bridge

LC STN Files: AGRICOLA, BIOSIS, BIOTECHNO, CA, CAPLUS, CHEMCATS, CSCHEM, DDFU, DRUGU, EMBASE, IPA, MEDLINE, PROMT, TOXCENTER, USPAT2, USPATFULL

L29 ANSWER 39 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **143298-48-0** REGISTRY
CN Proteinase inhibitor, cystatin S (human clone C3/C4-4 precursor reduced) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 11: PN: US6235708 SEQID:. . .

SEQ 1 MARPLCTLLL LMATLAGALA SSSKEENRII PGGIYDADLN DEWVQRALHF
========== ====
HITS AT: 21-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, USPATFULL

L29 ANSWER 40 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **136843-45-3** REGISTRY
CN L-Tyrosine, L-lysyl-L-arginyl-L-histidyl-L-histidylglycyl-L-tyrosyl-L-lysyl-L-arginyl-L-lysyl-L-phenylalanyl-L-histidyl-L-α-glutamyl-L-lysyl-L-histidyl-L-histidyl-L-seryl-L-histidyl-L-arginylglycyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Histatin 5 (human parotid saliva), 1-de-L-aspartic acid-2-de-L-serine-3-de-L-histidine-4-de-L-alanine-
OTHER NAMES:
CN. . .

SEQ 1 KRHHGYKRKF HEKHHSHRGY
==== ==========
HITS AT: 7-20
LC STN Files: CA, CAPLUS

L29 ANSWER 41 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **132796-31-7** REGISTRY
CN L-Tyrosine, glycyl-L-tyrosyl-L-lysyl-L-arginyl-L-lysyl-L-phenylalanyl-L-histidyl-L-α-glutamyl-L-lysyl-L-histidyl-L-histidyl-L-seryl-L-histidyl-L-arginylglycyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Histatin 8 (human parotid saliva), N2-[N2-[N2-(N-glycyl-L-tyrosyl)-L-lysyl]-L-arginyl]-
SQL 16

SEQ 1 GYKRKFHEKH HSHRGY
======== ======
HITS AT: 3-16

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS

L29 ANSWER 42 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **117233-32-6** REGISTRY
CN L-Tyrosine, L-α-aspartyl-L-seryl-L-histidyl-L-alanyl-L-lysyl-L-arginyl-L-histidyl-L-histidylglycyl-L-tyrosyl-L-lysyl-L-arginyl-L-lysyl-L-phenylalanyl-L-histidyl-L-α-glutamyl-L-lysyl-L-histidyl-L-histidyl-L-seryl-L-histidyl-L-arginylglycyl-L-tyrosyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Histatin 5 (human parotid saliva), 24a-L-tyrosine-
OTHER NAMES:
CN HRP. . .

SEQ 1 DSHAKRHHGY KRKFHEKHHS HRGYY
========== ====
HITS AT: 11-24
LC STN Files: CA, CAPLUS, MEDLINE, PROMT

L29 ANSWER 43 OF 43 REGISTRY COPYRIGHT 2006 ACS on STN
RN **115966-68-2** REGISTRY
CN L-Tyrosine, L-α-aspartyl-L-seryl-L-histidyl-L-alanyl-L-lysyl-L-arginyl-L-histidyl-L-histidylglycyl-L-tyrosyl-L-lysyl-L-arginyl-L-lysyl-L-phenylalanyl-L-histidyl-L-α-glutamyl-L-lysyl-L-histidyl-L-histidyl-L-seryl-L-histidyl-L-arginylglycyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 11: PN: US6844010 SEQID: 1 unclaimed protein
CN 14: PN: WO03014078 SEQID:. . .

SEQ 1 DSHAKRHHGY KRKFHEKHHS HRGY
========== ====
HITS AT: 11-24

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOSIS, CA, CAPLUS, CHEMCATS, CIN, CSCHEM, DDFU, DRUGU, MEDLINE, TOXCENTER, USPAT2, USPATFULL

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=> d his nofil

     (FILE 'HOME' ENTERED AT 16:39:25 ON 21 AUG 2006)

     FILE 'HCAPLUS' ENTERED AT 16:39:35 ON 21 AUG 2006
L1             1 SEA ABB=ON  PLU=ON  US200!-627314/APPS
                 SEL RN

     FILE 'REGISTRY' ENTERED AT 16:39:57 ON 21 AUG 2006
L2             9 SEA ABB=ON  PLU=ON  (155113-11-4/BI OR 183623-03-2/BI OR
                 220126-74-9/BI OR 223762-50-3/BI OR 230974-91-1/BI OR 230974-92
                 -2/BI OR 252209-80-6/BI OR 358644-55-0/BI OR 7558-79-4/BI)

     FILE 'HCAPLUS' ENTERED AT 16:40:14 ON 21 AUG 2006
L3             1 SEA ABB=ON  PLU=ON  L1 AND L2
                 D IALL HITSTR

     FILE 'REGISTRY' ENTERED AT 16:40:56 ON 21 AUG 2006
L4            39 SEA ABB=ON  PLU=ON  KRKFHEKHHSHRGY/SQSP
L5             3 SEA ABB=ON  PLU=ON  KRLFKKLKFSLRKY/SQSP
L6             1 SEA ABB=ON  PLU=ON  KRLFKKLLFSLRKY/SQSP
L7             1 SEA ABB=ON  PLU=ON  LLLFLLKKRKKRKY/SQSP
L8            89 SEA ABB=ON  PLU=ON  FKCRRWQWRMKKLG/SQSP
L9            72 SEA ABB=ON  PLU=ON  GRRRRSVQWCA/SQSP
L10           29 SEA ABB=ON  PLU=ON  SSSKEENRIIPGGI/SQSP
                 E BONE GROWTH/CN
L11            4 SEA ABB=ON  PLU=ON  BONE GROW?/CN

     FILE 'HCAPLUS' ENTERED AT 16:42:52 ON 21 AUG 2006
                 E BONE/CT
                 E E3+ALL
L12         6831 SEA ABB=ON  PLU=ON  BONE+PFT,NT/CT(L)(ARTIFIC? OR CEMENT?)
L13        11199 SEA ABB=ON  PLU=ON  BONE(L)(ARTIFIC? OR CEMENT?)
L14        11265 SEA ABB=ON  PLU=ON  L12 OR L13
L15        14248 SEA ABB=ON  PLU=ON  L14 OR BONE(8A)(?CEMENT? OR GLUE?)
                 E BONE FORMATION/CT
                 E E3+ALL
L16        21876 SEA ABB=ON  PLU=ON  BONE FORMATION+PFT/CT OR L15
                 E BONE GROWTH FACTOR/CT
                 E GROWTH FACTORS/CT
                 E E4+ALL
                 E GROWTH FACTORS, ANIMAL+ALL/CT
L17         8090 SEA ABB=ON  PLU=ON  GROWTH FACTORS, ANIMAL+PFT,NT/CT(L)BONE?
L18         8091 SEA ABB=ON  PLU=ON  L17 OR L11
L19         9062 SEA ABB=ON  PLU=ON  L18 OR BONE(3A)GROWTH FACTOR?
L20            1 SEA ABB=ON  PLU=ON  L16 AND (L4 OR L5 OR L6 OR L7 OR L8 OR L9
                 OR L10) AND L19
L21            1 SEA ABB=ON  PLU=ON  L20 AND L1
L22          500 SEA ABB=ON  PLU=ON  (L4 OR L5 OR L6 OR L7 OR L8 OR L9 OR L10)
L23            8 SEA ABB=ON  PLU=ON  L22 AND (L16 OR L19)
L24           24 SEA ABB=ON  PLU=ON  L22 AND ?BONE?
L25           24 SEA ABB=ON  PLU=ON  L23 OR L24

     FILE 'REGISTRY' ENTERED AT 16:50:05 ON 21 AUG 2006

     FILE 'HCAPLUS' ENTERED AT 16:50:11 ON 21 AUG 2006
L26              TRA PLU=ON  L25 1- RN :    1338 TERMS

     FILE 'REGISTRY' ENTERED AT 16:50:12 ON 21 AUG 2006
```

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L27         1338 SEA ABB=ON  PLU=ON  L26
L28          234 SEA ABB=ON  PLU=ON  (L4 OR L5 OR L6 OR L7 OR L8 OR L9 OR L10)
L29           43 SEA ABB=ON  PLU=ON  L27 AND L28
                 D L29 RN CN SQL KWIC NTE LC 1-43

     FILE 'HCAPLUS' ENTERED AT 16:51:47 ON 21 AUG 2006
L30           24 SEA ABB=ON  PLU=ON  L25 AND L29

=> d que l30
L4            39 SEA FILE=REGISTRY ABB=ON  PLU=ON  KRKFHEKHHSHRGY/SQSP
L5             3 SEA FILE=REGISTRY ABB=ON  PLU=ON  KRLFKKLKFSLRKY/SQSP
L6             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  KRLFKKLLFSLRKY/SQSP
L7             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  LLLFLLKKRKKRKY/SQSP
L8            89 SEA FILE=REGISTRY ABB=ON  PLU=ON  FKCRRWQWRMKKLG/SQSP
L9            72 SEA FILE=REGISTRY ABB=ON  PLU=ON  GRRRRSVQWCA/SQSP
L10           29 SEA FILE=REGISTRY ABB=ON  PLU=ON  SSSKEENRIIPGGI/SQSP
L11            4 SEA FILE=REGISTRY ABB=ON  PLU=ON  BONE GROW?/CN
L12         6831 SEA FILE=HCAPLUS ABB=ON  PLU=ON  BONE+PFT,NT/CT(L)(ARTIFIC? OR
                 CEMENT?)
L13        11199 SEA FILE=HCAPLUS ABB=ON  PLU=ON  BONE(L)(ARTIFIC? OR CEMENT?)
L14        11265 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L12 OR L13
L15        14248 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L14 OR BONE(8A)(?CEMENT? OR
                 GLUE?)
L16        21876 SEA FILE=HCAPLUS ABB=ON  PLU=ON  BONE FORMATION+PFT/CT OR L15
L17         8090 SEA FILE=HCAPLUS ABB=ON  PLU=ON  GROWTH FACTORS, ANIMAL+PFT,NT/
                 CT(L)BONE?
L18         8091 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L17 OR L11
L19         9062 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L18 OR BONE(3A)GROWTH FACTOR?

L22          500 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L4 OR L5 OR L6 OR L7 OR L8
                 OR L9 OR L10)
L23            8 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L22 AND (L16 OR L19)
L24           24 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L22 AND ?BONE?
L25           24 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L23 OR L24
L26              TRANSFER  PLU=ON  L25 1- RN :    1338 TERMS
L27         1338 SEA FILE=REGISTRY ABB=ON  PLU=ON  L26
L28          234 SEA FILE=REGISTRY ABB=ON  PLU=ON  (L4 OR L5 OR L6 OR L7 OR L8
                 OR L9 OR L10)
L29           43 SEA FILE=REGISTRY ABB=ON  PLU=ON  L27 AND L28
L30           24 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L25 AND L29


=> d l30 ibib abs hitind 1-24

L30  ANSWER 1 OF 24  HCAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:        2006:657208  HCAPLUS
DOCUMENT NUMBER:         145:120430
TITLE:                   Fusion products of biocides including phospholipase A2
                         for neutralization of Cryptosporidium parvum
INVENTOR(S):             Homan, Jane; Imboden, Michael; Riggs, Michael; Carryn,
                         Stephane; Schaefer, Deborah A.
PATENT ASSIGNEE(S):      Iogenetics, USA; University of Arizona
SOURCE:                  U.S. Pat. Appl. Publ., 111 pp., Cont.-in-part of U.S.
                         Ser. No. 844,837.
                         CODEN: USXXCO
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  2
PATENT INFORMATION:
```

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2006147442	A1	20060706	US 2005-254500		20051020
US 2005014932	A1	20050120	US 2004-844837		20040513
PRIORITY APPLN. INFO.:			US 2003-470841P	P	20030515
			US 2004-844837	A2	20040513
			US 2004-620642P	P	20041020

AB The present invention relates to the use of biocide (e.g., bactericidal enzyme) to target pathogens. In particular, the present invention provides biocides for use in health care (e.g., human and veterinary), agriculture (e.g., animal and plant production), and food processing (e.g., water purification). Active portions of lactoferrin hydrolyzate, lactoferrin b, cathelicidin, indolicidin, β-defensin-2, β-defensin-1, phospholipase A2, and phosphoinositol-specific phospholipase C are shown to neutralize Cryptosporidium parvum sporozoites. In addition, constructs are provided that encode novel microorganism targeting mols. (e.g., innate immune receptor ligands or monoclonal antibodies), novel fusion proteins, and chimeric monoclonal antibodies. Monoclonal antibody biocide (e.g., bactericidal enzymes) fusion proteins are produced in transgenic animals and cell cultures. In particular, soluble CD14, LBP (lipopolysaccharide-binding protein), SP-D (surfactant protein D), MBS (mannan-binding lectin), and monoclonal antibody 3H2 specific for GP25-200 target, are engineered into a retrovirus **backbone** for secretion as fusion proteins with human phospholipase A2.

INCL 424094610

CC 10-5 (Microbial, Algal, and Fungal Biochemistry)
Section cross-reference(s): 3

IT 273398-70-2 896750-54-2 896750-55-3 896750-56-4 896750-57-5
896750-58-6 896750-59-7 896750-60-0 896750-61-1 **896750-62-2**
896750-63-3 896750-64-4 896750-65-5 896750-66-6 896750-67-7
896750-68-8 896750-69-9 896750-70-2 896750-71-3 896750-72-4
896750-73-5 896750-74-6 896750-75-7 896750-76-8 896750-77-9
896750-78-0 896750-79-1 896750-80-4 896750-82-6 896750-83-7
896750-84-8 896750-85-9 896750-86-0 896750-87-1 896750-88-2
896750-89-3 896750-90-6 896750-91-7 896750-92-8 896750-93-9
896750-94-0 896750-95-1 896750-97-3 896750-98-4 896750-99-5
896751-00-1 896751-01-2 896751-02-3 896751-03-4 896751-04-5
896751-05-6 896751-06-7 896751-07-8 896751-08-9 896751-09-0
896751-10-3 896751-11-4 896751-12-5 896751-13-6 896751-14-7
896751-15-8
RL: PRP (Properties)
(unclaimed protein sequence; fusion products of biocides including phospholipase A2 for neutralization of Cryptosporidium parvum)

IT 88506-98-3, Defensin NP 5 (rabbit reduced) 99287-06-6 99287-07-7
99287-08-8 104883-59-2, Pardaxin P 2 105184-54-1, Pardaxin P 1
121068-88-0 121798-56-9 125667-96-1 133083-15-5, Defensin R 2 (rat reduced) 136831-50-0 142547-17-9, Bactenecin (reduced) 145671-67-6
150671-04-8 150671-05-9 151896-13-8, Dermaseptin II (Phyllomedusa sauvagei) 151896-14-9, Dermaseptin s 3 (Phyllomedusa sauvagei)
170867-20-6 172998-24-2, 16-36-Buforin I 183888-49-5
194019-49-3, Misgurin 260390-09-8 397275-72-8 397275-92-2
397276-28-7 397276-36-7 397276-40-3 397276-44-7 397276-48-1
896750-81-5 896750-96-2
RL: PRP (Properties)
(unclaimed sequence; fusion products of biocides including phospholipase A2 for neutralization of Cryptosporidium parvum)

L30 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:494213 HCAPLUS
DOCUMENT NUMBER: 145:1069
TITLE: Methods of immune or hematological enhancement, inhibiting tumor formation or growth, and treating or preventing cancer
INVENTOR(S): Kanwar, Jagat Rakesh; Haggarty, Neill Ward; Palmano, Kay Patricia; Krissansen, Geoffrey Wayne
PATENT ASSIGNEE(S): N. Z.
SOURCE: PCT Int. Appl., 149 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006054908	A1	20060526	WO 2005-NZ305	20051118

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2004-635814P P 20041119

AB The present invention relates to administration of metal ion-saturated lactoferrin, preferably bovine lactoferrin, preferably iron-saturated bovine lactoferrin, or a metal ion-saturated functional variant or fragment thereof to inhibit tumor formation or growth, maintain or improve one or both of the white blood cell count and red blood cell count, stimulate the immune system and treat or prevent cancer. The methods and medicinal uses of the invention may be carried out by employing dietary (as foods or food supplements), nutraceutical or pharmaceutical compns. Compns. useful in the methods of the invention are also provided.

CC 1-12 (Pharmacology)

IT Neoplasm
(**bone** marrow; metal ion-saturated lactoferrins for immune or hematol. enhancement and treating cancer using metal ion-saturated lactoferrins and combination with other agents)

IT Angiogenesis
Angiogenesis inhibitors
Antitumor agents
Bone marrow, neoplasm
Combination chemotherapy
Dietary supplements
Drug interactions
Hematopoietic neoplasm
Hemorrhage
Human
Immunostimulants
Immunostimulation
Immunotherapy
Leukemia

Lung, neoplasm
Lymphoma
Mammary gland, neoplasm
Melanoma
Multiple myeloma
Neoplasm
Radiotherapy
Skin, neoplasm
Surgery
(metal ion-saturated lactoferrins for immune or hematol. enhancement and treating cancer using metal ion-saturated lactoferrins and combination with other agents)

IT 139845-87-7, GenBank X54801 175829-69-3, GenBank U53857 199303-14-5, GenBank AAA97958 216129-25-8, GenBank AJ010930 217515-54-3, GenBank AJ005203 236383-34-9, GenBank AJ131674 240488-77-1, GenBank CAA06441 240488-78-2, GenBank CAA09407 261888-61-3, GenBank CAB53387 **481510-83-2**, GenBank CAA38572 481514-22-1, GenBank CAA55517 481559-25-5, GenBank AAL40161 625326-81-0, GenBank AAP70487
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(methods of immune or hematol. enhancement, inhibiting tumor formation or growth, and treating or preventing cancer)

IT **887953-90-4 887953-91-5 887953-92-6 887953-93-7** 887953-94-8 887953-95-9 887953-96-0 887953-97-1 887953-98-2 887953-99-3 **887954-00-9 887954-01-0 887954-02-1 887954-03-2 887954-04-3 887954-05-4 887954-06-5**
RL: PRP (Properties)
(unclaimed protein sequence; methods of immune or hematol. enhancement, inhibiting tumor formation or growth, and treating or preventing cancer)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:411581 HCAPLUS
DOCUMENT NUMBER: 144:474801
TITLE: Protein sequences of lactoferrin related peptides and uses thereof
INVENTOR(S): Varadhachary, Atul; Glynn, Peter; Petrak, Karel; Engelmayer, Jose
PATENT ASSIGNEE(S): Agennix Inc., USA
SOURCE: PCT Int. Appl., 218 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006047744	A2	20060504	WO 2005-US38981	20051026

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

US 2006094082 A1 20060504 US 2005-258767 20051026

PRIORITY APPLN. INFO.: US 2004-622176P P 20041026

AB The present invention is directed to a composition consisting of a series of novel biol. active 33-mer peptides. The peptides comprise at least 33 amino acids in which at least four amino acids at the C and/or N terminus are substituted for pos. charged amino acids, such as lysine and arginine. Thes biol. active pepetides can be used to treat a variety of pathol. conditions, for example hyperproliferative disease, respiratory disorder, cardiovascular disease, neurol. condition, autoimmune disorder, infectious disese, gastrointestinal disorder, endocrine and/or metabolism disorder, ocular disorder, integument disorder, pain and wound. The present invention comprises a pharmaceutical composition that induces modulation of the immune system whereby the composition stimulates production of MIP-3α from hepatocytes. The composition can also inhibit bacterial growth as measured by min. inhibitory concentration

CC 63-3 (Pharmaceuticals)
Section cross-reference(s): 1, 3, 6, 15

IT **Bone**, disease
(fracture; protein sequences of lactoferrin related peptides and uses thereof)

IT AIDS (disease)
Adenoma
Adenoviral vectors
Alzheimer's disease
Anemia (disease)
Antigen-presenting cell
Antitumor agents
Atherosclerosis
Autoimmune disease
B cell (lymphocyte)
Bacteremia
Bladder, neoplasm
Blood, disease
Bone, neoplasm
Brain, neoplasm
CD4-positive T cell
CD8-positive T cell
Cachexia
Cardiovascular system, disease
Chelating agents
Chemotherapy
Cystic fibrosis
Dendritic cell
Dermatomyositis
Diabetes mellitus
Digestive tract, disease
Digestive tract, neoplasm
Drug screening
Drugs
Dyslipidemia
Emphysema
Endocrine system, disease
Eye, disease
Gene therapy

Genetic vectors
Glaucoma (disease)
Head and Neck, neoplasm
Hematopoietic neoplasm
Hepatitis
Human
Hypertension
Immune system
Immunomodulators
Immunostimulants
Immunotherapy
Infection
Kidney, neoplasm
Lentiviral vectors
Leukemia
Lung, disease
Lung, neoplasm
Lymphoma
Macrophage
Mammary gland, neoplasm
Melanoma
Metabolic disorders
Molecular cloning
Monocyte
Multiple myeloma
Multiple sclerosis
Muscular dystrophy
Mycosis
Neoplasm
Nervous system, disease
Osteoarthritis
Osteoporosis
Ovary, neoplasm
Pain
Pancreas, neoplasm
Parkinson's disease
Periodontium, disease
Plasmid vectors
Prostate gland, neoplasm
Protein sequences
Psoriasis
Radiotherapy
Respiratory system, disease
Retroviral vectors
Rheumatoid arthritis
Sarcoma
Sepsis
Septicemia
Sickle cell anemia
Sleep
Surgery
T cell (lymphocyte)
Testis, neoplasm
Thyroid gland, disease
Tongue, neoplasm
Transplant rejection
Viral vectors
West Nile virus
Wound

(protein sequences of lactoferrin related peptides and uses thereof)

IT 886088-18-2 **886088-19-3** 886088-20-6 **886088-21-7**
886088-22-8 886088-23-9 886088-24-0 886088-25-1
886088-26-2 886088-27-3 886088-28-4 886088-29-5
886088-30-8 **886088-31-9** 886088-32-0 **886088-33-1**
886088-34-2 886088-35-3 886088-36-4 **886088-37-5**
886088-38-6 886088-39-7 886088-40-0 **886088-41-1**
RL: PRP (Properties)
(unclaimed protein sequence; protein sequences of lactoferrin related peptides and uses thereof)

L30 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1253417 HCAPLUS
DOCUMENT NUMBER: 144:100422
TITLE: Histatin and lactoferrin derived peptides: Antimicrobial properties and effects on mammalian cells
AUTHOR(S): Stallmann, Hein P.; Faber, Chris; Bronckers, Antonius L. J. J.; de Blieck-Hogervorst, Jolanda M. A.; Brouwer, Carlo P. J. M.; Amerongen, Arie V. Nieuw; Wuisman, Paul I. J. M.
CORPORATE SOURCE: Orthopedic Surgery, VU Medical Center, Amsterdam, 1007 MB, Neth.
SOURCE: Peptides (New York, NY, United States) (2005), 26(12), 2355-2359
CODEN: PPTDD5; ISSN: 0196-9781
PUBLISHER: Elsevier Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In order to analyze the clin. potential of two antimicrobial peptides, human lactoferrin 1-11 (hLF1-11) and synthetic histatin analog Dhvar-5, the authors measured the killing effect on bacteria, and the potential toxicity on erythrocytes and **bone** cells. The antimicrobial activity was determined in a killing assay on six strains, including methicillin resistant Staphylococcus Aureus. The effect on human erythrocytes and MC3T3 mouse **bone** cells was measured with a hemolysis assay and a viability assay, resp. Both hLF1-11 and Dhvar-5 dose-dependently killed all bacterial strains, starting at concns. of 6 μg/mL. HLF1-11 had no effect on mammalian cells at concns. up to 400 μg/mL, but Dhvar-5 induced significant hemolysis (37% at 200 μg/mL) and **bone** cell death (70% at 400 μg/mL). This indicates that both peptides are able to kill various resistant and nonresistant bacteria, but Dhvar-5 may exert a cytotoxic effect on host cells at higher concns.
CC 1-5 (Pharmacology)
IT **183623-03-2** **230974-92-2**, Dhvar-5
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antimicrobial properties and effects on mammalian cells of histatin and lactoferrin derived peptides)
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:522069 HCAPLUS
DOCUMENT NUMBER: 143:56162
TITLE: Cell proliferating agents containing basic antimicrobial peptides and cell culture method using the agents

INVENTOR(S): Nikawa, Hiroki; Hamada, Taizo; Aoki, Mie; Nishimura, Masahiro; Tsuji, Koichiro
PATENT ASSIGNEE(S): Japan Science and Technology Agency, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005154338	A2	20050616	JP 2003-395008	20031126
PRIORITY APPLN. INFO.:			JP 2003-395008	20031126

AB Cell proliferating agents, e.g. for mesenchymal stem cells, fibroblasts, etc., contain basic antimicrobial peptides and optionally cell growth factors such as bFGF. Also claimed is in vivo, ex vivo, or in vitro cell proliferation method using the above agents.
IC ICM C07K007-08
ICS A61P043-00; C12N005-06; A61K035-32; A61K038-00; A61P001-02; A61P031-04; C07K014-47
CC 9-11 (Biochemical Methods)
IT Jaw
(alveolar **bone**, marrow or periosteum, mesenchymal cells from; cell proliferating agents containing basic antimicrobial peptides and optionally cell growth factors for cell culture of mesenchymal stem cells, fibroblasts, etc.)
IT **Bone** marrow
(alveolar **bone**, mesenchymal cells from; cell proliferating agents containing basic antimicrobial peptides and optionally cell growth factors for cell culture of mesenchymal stem cells, fibroblasts, etc.)
IT **Bone**
(periosteum, alveolar **bone**, mesenchymal cells from; cell proliferating agents containing basic antimicrobial peptides and optionally cell growth factors for cell culture of mesenchymal stem cells, fibroblasts, etc.)
IT 106096-93-9, Basic FGF **170867-20-6** 177554-51-7 256428-00-9 438624-76-1 438624-98-7 853885-40-2 853962-33-1, beta-defesin 2 (human)
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(cell proliferating agents containing basic antimicrobial peptides and optionally cell growth factors for cell culture of mesenchymal stem cells, fibroblasts, etc.)

L30 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:384782 HCAPLUS
DOCUMENT NUMBER: 143:353214
TITLE: The effect of the antimicrobial peptide, Dhvar-5, on gentamicin release from a polymethyl methacrylate **bone cement**
AUTHOR(S): Faber, C.; Hoogendoorn, R. J. W.; Lyaruu, D. M.; Stallmann, H. P.; van Marle, J.; van Nieuw Amerongen, A.; Smit, T. H.; Wuisman, P. I. J. M.
CORPORATE SOURCE: SKELETAL TISSUE ENGINEERING GROUP AMSTERDAM, Department of Orthopaedic Surgery, VU University Medical Center (VUmc), Vrije Universiteit, Amsterdam, 1007 MB, Neth.
SOURCE: Biomaterials (2005), 26(28), 5717-5726

CODEN: BIMADU; ISSN: 0142-9612
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The objective of this study was to investigate the release mechanism and kinetics of the antimicrobial peptide, Dhvar-5, both alone and in combination with gentamicin, from a standard com. polymethyl methacrylate (PMMA) **bone cement**. Different amts. of Dhvar-5 were mixed with the **bone cement** powders of Osteopal and the gentamicin-containing Osteopal G **bone cement** and their release kinetics from the polymerized **cement** were investigated. Addnl., the internal structure of the **bone cements** were analyzed by SEM (SEM) of the fracture surfaces. Secondly, porosity was investigated with the mercury intrusion method and related to the observed release profiles. In order to obtain an insight into the mech. characteristics of the **bone cement** mixts., the compressive strength of Osteopal and Osteopal G with Dhvar-5 was also investigated. The total Dhvar-5 release reached 96% in the 100 mg Dhvar-5/g Osteopal **cement**, whereas total gentamicin release from Osteopal G reached only 18%. Total gentamicin release increased significantly to 67% with the addition of 50 mg Dhvar-5/g, but the Dhvar-5 release was not influenced. SEM showed an increase of dissolved gentamicin crystals with the addition of Dhvar-5. The mercury intrusion results suggested an increase of small pores (<0.1 μm) with the addition of Dhvar-5. Compressive strength of Osteopal was reduced by the addition of Dhvar-5 and gentamicin, but still remained above the limit prescribed by the ISO standard for clin. **bone cements**. We therefore conclude that the antimicrobial peptide, Dhvar-5, was released in high amts. from PMMA **bone cement**. When used together with gentamicin sulfate, Dhvar-5 made the gentamicin crystals accessible for the release medium presumably through increased micro-porosity (<0.1 μm) resulting in a fourfold increase of gentamicin release.

CC 63-7 (Pharmaceuticals)
ST antimicrobial peptide Dhvar 5 gentamicin polymethyl methacrylate **bone cement**
IT Peptides, biological studies
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antimicrobial; effect of antimicrobial peptide Dhvar-5 on gentamicin release from a polymethyl methacrylate **bone cement**)
IT Medical goods
(**bone cements**; effect of antimicrobial peptide Dhvar-5 on gentamicin release from a polymethyl methacrylate **bone cement**)
IT Compressive strength
Dissolution
Porosity
(effect of antimicrobial peptide Dhvar-5 on gentamicin release from a polymethyl methacrylate **bone cement**)
IT Antimicrobial agents
(peptide; effect of antimicrobial peptide Dhvar-5 on gentamicin release from a polymethyl methacrylate **bone cement**)
IT 1403-66-3, Gentamicin 9011-14-7, Polymethyl methacrylate 211431-51-5, Osteopal **230974-92-2**, Dhvar-5
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effect of antimicrobial peptide Dhvar-5 on gentamicin release from a polymethyl methacrylate **bone cement**)
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:1072595 HCAPLUS
DOCUMENT NUMBER: 142:171820
TITLE: Enhancement of endotoxin neutralization by coupling of a C12-alkyl chain to a lactoferricin-derived peptide
AUTHOR(S): Andrae, Joerg; Lohner, Karl; Blondelle, Sylvie E.; Jerala, Roman; Moriyon, Ignacio; Koch, Michel H. J.; Garidel, Patrick; Brandenburg, Klaus
CORPORATE SOURCE: Research Center Borstel, Division of Biophysics, Leibniz-Center for Medicine and Biosciences, Borstel, D-23845, Germany
SOURCE: Biochemical Journal (2005), 385(1), 135-143
CODEN: BIJOAK; ISSN: 0264-6021
PUBLISHER: Portland Press Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Antibacterial peptide acylation, which mimics the structure of the natural lipopeptide polymyxin B, increases antimicrobial and endotoxin-neutralizing activities. The interaction of the lactoferricin-derived peptide LF11 and its N-terminally acylated analog, lauryl-LF11, with different chemotypes of bacterial lipopolysaccharide (LPS Re, Ra and smooth S form) was investigated by biophys. means and was related to the peptides' biol. activities. Both peptides exhibit high antibacterial activity against the three strains of Salmonella enterica differing in the LPS chemotype. Lauryl-LF11 has one order of magnitude higher activity against Re-type, but activity against Ra- and S-type bacteria is comparable with that of LF11. The alkyl derivative peptide lauryl-LF11 shows a much stronger inhibition of the LPS-induced cytokine induction in human mononuclear cells than LF11. Although peptide-LPS interaction is essentially of electrostatic nature, the lauryl-modified peptide displays a strong hydrophobic component. Such a feature might then explain the fact that saturation of the peptide binding takes place at a much lower peptide/LPS ratio for LF11 than for lauryl-LF11, and that an overcompensation of the neg. LPS **backbone** charges is observed for lauryl-LF11. The influence of LF11 on the gel-to-liquid-crystalline phase-transition of LPS is negligible for LPS Re, but clearly fluidizing for LPS Ra. In contrast, lauryl-LF11 causes a cholesterol-like effect in the two chemotypes, fluidizing in the gel and rigidification of the hydrocarbon chains in the liquid-crystalline phase. Both peptides convert the mixed unilamellar/non-lamellar aggregate structure of lipid A, the endotoxic principle' of LPS, into a multilamellar one. These data contribute to the understanding of the mechanisms of the peptide-mediated neutralization of endotoxin and effect of lipid modification of peptides.
CC 6-7 (General Biochemistry)
IT **146897-68-9**, Lactoferricin
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(addition of hydrophobic C12 acyl chain to human lactoferricin-derived peptide promotes enhanced neutralization of S. enterica Re-type LPS endotoxin)
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:1070044 HCAPLUS
DOCUMENT NUMBER: 142:169087
TITLE: In vivo comparison of Dhvar-5 and gentamicin in an MRSA osteomyelitis prevention model

AUTHOR(S): Faber, Christopher; Hoogendoorn, Roel J. W.; Stallmann, Hein P.; Lyaruu, D. M.; van Nieuw Amerongen, Arie; Wuisman, Paul I. J. M.
CORPORATE SOURCE: Department of Orthopaedic Surgery, VU University Medical Center, Amsterdam, 1007 MB, Neth.
SOURCE: Journal of Antimicrobial Chemotherapy (2004), 54(6), 1078-1084
CODEN: JACHDX; ISSN: 0305-7453
PUBLISHER: Oxford University Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The continued rise in drug-resistant pathogens has led to global research efforts into new antimicrobial agents. A promising class of new agents are the antimicrobial peptides. The aim of the study was to investigate the efficacy of the antimicrobial peptide Dhvar-5 in a prophylactic, methicillin-resistant Staphylococcus aureus (MRSA) osteomyelitis model. Dhvar-5 (12 mg or 24 mg/rabbit) was incorporated into polymethyl methacrylate (PMMA) beads as a local drug delivery system. For comparison, plain beads (control) and beads containing gentamicin as a sulfate (10 mg or 24 mg per rabbit) were also prepared The beads were inserted into the inoculated femoral cavity of 36 rabbits, and 1 wk later they were killed. The presence and severity of MRSA osteomyelitis was assessed by culture and histol. Both the 24 mg Dhvar-5 beads and the 24 mg gentamicin sulfate beads significantly reduced the bacterial load of the inoculated femora compared with the control chain. Although a 24 mg Dhvar-5 dose inhibited MRSA growth, it did not completely sterilize the femora. Sterilization occurred only in some of the gentamicin-treated specimens. The authors conclude that both the gentamicin beads and the Dhvar-5 beads were only partially effective at preventing MRSA infection in this model.

CC 1-5 (Pharmacology)
Section cross-reference(s): 63

IT **Bone**
(femur; in vivo comparison of Dhvar-5 and gentamicin released from implanted beads in methicillin-resistant Staphylococcus aureus osteomyelitis prevention model)

IT 1405-41-0, Gentamicin sulfate **230974-92-2**, Dhvar-5
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(in vivo comparison of Dhvar-5 and gentamicin released from implanted beads in methicillin-resistant Staphylococcus aureus osteomyelitis prevention model)

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:721139 HCAPLUS
DOCUMENT NUMBER: 141:235763
TITLE: Osteomyelitis prevention in rabbits using antimicrobial peptide hLF1-11- or gentamicin-containing calcium phosphate cement
AUTHOR(S): Stallmann, Hein P.; Faber, Christopher; Bronckers, Antonius L. J. J.; Amerongen, Arie V. Nieuw; Wuisman, Paul I. J. M.
CORPORATE SOURCE: Department of Orthopaedic Surgery, VU University Medical Center, Amsterdam, 1007 MB, Neth.
SOURCE: Journal of Antimicrobial Chemotherapy (2004), 54(2), 472-476
CODEN: JACHDX; ISSN: 0305-7453
PUBLISHER: Oxford University Press

DOCUMENT TYPE: Journal
LANGUAGE: English
AB The efficacy of prophylactic treatment with human lactoferrin 1-11 (hLF1-11), a broad-spectrum antimicrobial peptide, was studied in a rabbit model of femur infection. Calcium phosphate **cement** with 50 mg/g hLF1-11 or gentamicin was injected into the femoral canal, after inoculation with Staphylococcus aureus. Three weeks later, slices of the proximal femora were sawn for quant. bacterial culture and histol. Treatment with hLF1-11 ($P < 0.038$) or gentamicin ($P < 0.008$) caused a reduction of cfu compared with the untreated control rabbits. The number of sterile cultures was higher in hLF1-11- (3/7) and gentamicin- (5/6) treated animals than in controls (1/7). Radiol. and histol. anal. showed early **bone** ingrowth into the **cement** cracks, and only moderate pathol. changes in rabbits with pos. cultures. Local prophylaxis with hLF1-11 effectively reduced development of osteomyelitis in a rabbit model, but gentamicin resulted in a larger number of sterile femora.
CC 1-5 (Pharmacology)
IT 1403-66-3, Gentamicin **183623-03-2**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(osteomyelitis prevention using antimicrobial peptide hLF1-11- or gentamicin-containing calcium phosphate cement)
REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:710367 HCAPLUS
DOCUMENT NUMBER: 141:222266
TITLE: pH Sensing by the Calcium-sensing Receptor
AUTHOR(S): Quinn, Stephen J.; Bai, Mei; Brown, Edward M.
CORPORATE SOURCE: Division of Endocrinology, Diabetes, and Hypertension, Department of Medicine, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, 02115, USA
SOURCE: Journal of Biological Chemistry (2004), 279(36), 37241-37249
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular Biology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The calcium-sensing receptor (CaR) is activated by small changes in the ionic extracellular calcium concentration (Cao) within the physiol. range, allowing the parathyroid gland to regulate serum Cao; however, the CaR is also distributed in a number of other tissues where it may sense other endogenous agonists and modulators. CaR agonists are polycationic mols., and our previous studies suggest that charged residues in the extracellular domain of the CaR are critical for receptor activation through electrostatic interactions. Therefore, pH could also potentially modulate CaR activation by its polycationic agonists. Changes in the concentration of extracellular H+ substantially altered the activation of the CaR by Cao and other CaR agonists. The effects of external pH on the CaR's sensitivity to its agonists were observed for both acidic and basic deviations from physiol. pH of 7.4, with increases in pH rendering the receptor more sensitive to activation by Cao and decreases in pH producing the converse effect. At pH values more acidic than 5.5, CaR sensitivity to its agonists showed some recovery. Changes in the intracellular pH could not account for the effects of external pH on CaR sensitivity to its agonists. Other G-protein-coupled receptors, which are endogenously expressed in human embryonic kidney 293 cells, showed little change in

activity with alterations in external pH or effects opposite those found for the CaR. Extracellular pH directly alters the CaR in the case of Cao and Mgo activation; however, the charges on many organic and inorg. agonists are pH-dependent. Activating CaR mutations show reduced pHo modulation, suggesting a mol. mechanism for increased CaR activity at physiol. pHo. Several CaR-expressing tissues, including regions of the stomach, the kidney, **bone**, and the brain, could potentially use the CaR as a sensor for pH and acid-base status.

CC 13-2 (Mammalian Biochemistry)

IT 71-44-3, Spermine 1404-04-2, Neomycin 7429-90-5, Aluminum, biological studies 7439-95-4, Magnesium, biological studies 7440-54-2, Gadolinium, biological studies **115966-68-2**, Histatin 5
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(effect of pH on activation of calcium-sensing receptor by polyvalent cations and polycationic agonists)

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:606586 HCAPLUS
DOCUMENT NUMBER: 141:134694
TITLE: Method for the use of biomarkers responsive to epidermal growth factor receptor (EGFR) modulation in the evaluation of cancer treatment with EGFR modulators
INVENTOR(S): Amler, Lukas C.; Januario, Thomas
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 520 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004063709	A2	20040729	WO 2004-US368	20040108
WO 2004063709	C1	20050331		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ				
CA 2512536	AA	20040729	CA 2004-2512536	20040108
EP 1597558	A2	20051123	EP 2004-700860	20040108
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				

PRIORITY APPLN. INFO.: US 2003-438735P P 20030108
WO 2004-US368 W 20040108

AB EGFR biomarkers useful in a method for identifying a mammal that will respond therapeutically to a method of treating cancer comprising administering an EGFR modulator, wherein the method comprises (a) exposing the mammal to the EGFR modulator and (b) measuring in the mammal level of at least one biomarker, wherein a difference in the level in at least one biomarker measured in (b) compared to the level of the biomarker in a mammal that has not been exposed to the EGFR modulator indicates that the mammal will respond therapeutically to the method of treating cancer.

IC ICM G01N

CC 2-10 (Mammalian Hormones)

Section cross-reference(s): 1
IT **Bone** morphogenetic protein 2
CFTR (cystic fibrosis transmembrane conductance regulator)
EST (expressed sequence tag)
RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
(method for use of biomarkers responsive to epidermal growth factor receptor (EGFR) modulation in evaluation of cancer treatment with EGFR modulators)
IT 724913-10-4 724913-13-7, **Bone** morphogenic protein 2 (human)
724913-15-9, Brain-specific protein p25α (human) 724913-17-1
724913-19-3, Protein BTG2 (human) 724913-21-7 724913-23-9, Proteinase, FLICE2 (human) 724913-25-1, RNA-binding protein 2 (human)
724913-27-3, Proteinase inhibitor, cystatin S (human)
724913-29-5 724913-31-9 724913-33-1, Peptidase, dipeptidyl, IV (human)
724913-37-5 724913-41-1 724913-43-3 724913-45-5, G protein-coupled receptor 49 (human) 724913-47-7, Protein hairless mouse homolog (human)
724913-49-9, Hemoglobin α1 (human) 724913-52-4, Heparanase (human)
724913-54-6 724913-56-8, HERV-H LTR-associating 2 (human) 724913-60-4, Protein FLJ20048 (human) 724913-62-6, Protein FLJ20075 (human)
724913-66-0, Matrilin 3 (human) 724913-68-2, Metastasis-associated 1-like 1 (human) 724913-70-6 724913-72-8, Mucin 3B (human)
724913-74-0 724913-76-2, Myosin light polypeptide 5 (human)
724913-78-4 724913-80-8 724913-82-0 724913-84-2 724913-86-4, Phosducin (human) 724913-88-6, Phosphatase and tensin homolog (human)
724913-90-0, Potassium channel TWIK (human) 724913-92-2 724913-94-4
724913-98-8 724914-00-5, Ribonuclease A family 1 (human) 724914-02-7
724914-05-0 724914-07-2 724914-09-4 724914-11-8, Zinc finger protein 137 (human) 724914-14-1, Regenerating gene type IV (human) 724914-18-5
724914-23-2, KIAA1190 (human unordered fragment) 724914-25-4, KIAA1543 (human) 724914-35-6 724914-55-0, PAC clone RP5-855D21 (human)
724914-56-1, PAC clone RP5-855D21 (human) 724914-57-2, PAC clone RP5-855D21 (human)
RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; method for use of biomarkers responsive to epidermal growth factor receptor (EGFR) modulation in evaluation of cancer treatment with EGFR modulators)

L30 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:951061 HCAPLUS
DOCUMENT NUMBER: 140:26964
TITLE: Use of the lantibiotic transport system to secrete foreign proteins into culture medium for purification
INVENTOR(S): Moll, Gert Nikolaas; Leenhouts, Cornelis Johannes; Kuipers, Oscar Paul; Driessen, Arnold Jacob Mathieu
PATENT ASSIGNEE(S): Applied Nanosystems B.V., Neth.
SOURCE: PCT Int. Appl., 109 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003099862	A1	20031204	WO 2003-NL389	20030526
WO 2003099862	C1	20040311		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2004009550	A1	20040115	US 2003-360101		20030207
US 6861236	B2	20050301			
CA 2487351	AA	20031204	CA 2003-2487351		20030526
AU 2003238714	A1	20031212	AU 2003-238714		20030526
EP 1507798	A1	20050223	EP 2003-733622		20030526
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
CN 1671737	A	20050921	CN 2003-817698		20030526
PRIORITY APPLN. INFO.:			EP 2002-77060	A	20020524
			US 2003-360101	A	20030207
			WO 2003-NL389	W	20030526

AB Methods of using the mechanisms involved in the secretion of lantibiotics to secrete foreign proteins from lantibiotic-producing hosts is described. The method can also be used to secrete lantibiotics before they have undergone post-translational modification, such as dehydration of a serine or a threonine, and/or thioether bridge formation, or to increase the efficiency of secretion of fully processed lantibiotics. A Lactococcus lactis strain lacking the entire nisin A biosynthetic gene cluster was transformed with a plasmid carrying the nisin A structural gene nisA and the transport protein nisT. This transgenic strain efficiently secreted the unmodified nisin A protein, indicating that lanT was sufficient to export the protein. Use of the signal peptide to direct secretion of an angiotensin variant is demonstrated. Use of the transport protein, the lantibiotic signal peptide, and the lantibiotic-modifying dehydrases and cyclases to manufacture novel variants of peptide hormones with modified amino is also demonstrated.

IC ICM C07K014-315
CC 16-1 (Fermentation and Bioindustrial Chemistry)
Section cross-reference(s): 3, 10

IT **Bone morphogenetic proteins**
RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)
(BMP7, fragments, lanthionine-containing derivs., secretory manufacture of; use
of lantibiotic transport system to secrete foreign proteins into culture medium for purification)

IT 50-56-6DP, Oxytocin, fragments, lanthionine-containing derivs. 58-82-2DP, Bradykinin, fragments, lanthionine-containing derivs. 69-25-0DP, Eledoisin, fragments, lanthionine-containing derivs. 1393-25-5DP, Secretin, fragments, lanthionine-containing derivs. 1393-34-6DP, Streptin, fusion peptides 1393-38-0DP, Subtilin, fusion peptides 1407-47-2P, Angiotensin 8001-27-2DP, Hirudin, fragments, lanthionine-containing derivs. 9000-94-6DP, Antithrombin III, fragments, lanthionine-containing derivs. 9001-05-2DP, Catalase, fragments, lanthionine-containing derivs. 9001-09-6DP, Chymopapain, fragments, lanthionine-containing derivs. 9001-25-6DP, Blood-coagulation factor VII, fragments, lanthionine-containing derivs. 9001-26-7DP, Prothrombin, fragments, lanthionine-containing derivs. 9001-29-0DP, Factor X, fragments, lanthionine-containing derivs. 9001-57-4DP, Invertase, fragments, lanthionine-containing derivs. 9001-63-2DP, Lysozyme, fragments, lanthionine-containing derivs. 9001-75-6DP, Pepsin, fragments, lanthionine-containing derivs. 9001-91-6DP, Plasminogen, fragments, lanthionine-containing derivs. 9002-01-1DP,

Streptokinase, fragments, lanthionine-containing derivs. 9002-60-2DP, Adrenocorticotropic hormone, fragments, lanthionine-containing derivs. 9002-61-3DP, Chorionic gonadotropin, fragments, lanthionine-containing derivs. 9002-64-6DP, Parathormone, fragments, lanthionine-containing derivs. 9002-68-0DP, Follitropin, fragments, lanthionine-containing derivs. 9002-71-5DP, Thyrotropin, fragments, lanthionine-containing derivs. 9002-72-6DP, Somatotropin, fragments, lanthionine-containing derivs. 9004-07-3DP, Chymotrypsin, fragments, lanthionine-containing derivs. 9004-10-8DP, Insulin, fragments, lanthionine-containing derivs. 9007-12-9DP, Calcitonin, fragments, lanthionine-containing derivs. 9007-92-5P, Glucagon, preparation 9011-97-6DP, Cholecystokinin, fragments, lanthionine-containing derivs. 9012-54-8DP, Cellulase, fragments, lanthionine-containing derivs. 9015-68-3DP, Asparaginase, fragments, lanthionine-containing derivs. 9015-71-8DP, Corticotropin Releasing Factor, fragments, lanthionine-containing derivs. 9025-35-8DP, fragments, lanthionine-containing derivs. 9034-39-3DP, Somatoliberin, fragments, lanthionine-containing derivs. 9034-40-6DP, Luteinizing Hormone Releasing Hormone, fragments, lanthionine-containing derivs. 9039-53-6DP, Urokinase, fragments, lanthionine-containing derivs. 9041-90-1DP, Angiotensin I, fragments, lanthionine-containing derivs. 11000-17-2P, Vasopressin 11096-26-7DP, Erythropoietin, fragments, lanthionine-containing derivs. 14636-12-5DP, Terlipressin, fragments, lanthionine-containing derivs. 24305-27-9DP, Protirelin, fragments, lanthionine-containing derivs. 29705-92-8DP, Experimental allergenic encephalitogenic peptide, fragments, lanthionine-containing derivs. 37228-64-1DP, Glucosylceramidase, fragments, lanthionine-containing derivs. 37231-28-0DP, Melittin, fragments, lanthionine-containing derivs. 37326-33-3DP, Hyaluronidase, fragments, lanthionine-containing derivs. 37340-82-2DP, Streptodornase, fragments, lanthionine-containing derivs. 52906-92-0DP, Motilin, fragments, lanthionine-containing derivs. 53714-56-0DP, Leuprolide, fragments, lanthionine-containing derivs. 55068-79-6DP, Bombinin, fragments, lanthionine-containing derivs. 58569-55-4DP, Metenkephalin, fragments, lanthionine-containing derivs. 58822-25-6DP, Leuenkephalin, fragments, lanthionine-containing derivs. 59233-00-0DP, Big gastrin I, fragments, lanthionine-containing derivs. 59392-49-3DP, Gastric Inhibitory Polypeptide, fragments, lanthionine-containing derivs. 60617-12-1DP, β-Endorphin, fragments, lanthionine-containing derivs. 60880-63-9DP, Anthopleurin-A, fragments, lanthionine-containing derivs. 61512-76-3DP, α-Endorphin, fragments, lanthionine-containing derivs. 62031-54-3DP, Fibroblast growth factor, fragments, lanthionine-containing derivs. 65323-99-1DP, Staphylococcin C55, fusion peptides 66796-54-1DP, Proopiomelanocortin, fragments, lanthionine-containing derivs. 67775-30-8DP, Streptococcin-A-FF22, fusion peptides 69431-45-4DP, Delta sleep inducing peptide, fragments, lanthionine-containing derivs. 72093-21-1DP, Mastoparan, fragments, lanthionine-containing derivs. 75976-10-2DP, Human pancreatic polypeptide, fragments, lanthionine-containing derivs. 80043-53-4DP, Gastrin Releasing Peptide, fragments, lanthionine-containing derivs. 80451-05-4DP, Cecropin B, fragments, lanthionine-containing derivs. 82785-45-3DP, Neuropeptide Y, fragments, lanthionine-containing derivs. 84746-43-0DP, Small Cardioactive peptide B, fragments, lanthionine-containing derivs. 84931-86-2DP, Pep-5, fusion peptides 85637-73-6DP, Atrial Natriuretic Factor, fragments, lanthionine-containing derivs. 86168-78-7DP, Sermorelin, fragments, lanthionine-containing derivs. 93438-37-0DP, Helospectin I, fragments, lanthionine-containing derivs. 95751-30-7DP, Charybdotoxin, fragments, lanthionine-containing derivs. 95918-56-2DP, Urotensin II, fragments, lanthionine-containing derivs. 96477-38-2DP, MutacinII, fusion peptides 98035-79-1DP, fragments, lanthionine-containing derivs. 99165-17-0DP, Epidermin, fusion peptides 102714-10-3DP, Gonadotropin releasing hormone II, fragments, lanthionine-containing derivs.

103220-14-0DP, Defensin, fragments, lanthionine-containing derivs.
104052-00-8DP, Leucopyrokinin, fragments, lanthionine-containing derivs.
104600-89-7DP, Leucokinin I, fragments, lanthionine-containing derivs.
105857-23-6DP, Alteplase, fragments, lanthionine-containing derivs.
106096-92-8DP, Acidic fibroblast growth factor, fragments, lanthionine-containing derivs. 106096-93-9DP, Basic fibroblast growth factor, fragments, lanthionine-containing derivs. 106388-42-5DP, Peptide YY, fragments, lanthionine-containing derivs. 107231-12-9DP, Botulin, fragments, lanthionine-containing derivs. 108433-99-4DP, Magainin-1, fragments, lanthionine-containing derivs. 110655-58-8DP, Cinnamycin, fusion peptides 111317-91-0DP, Conopressin G, fragments, lanthionine-containing derivs. 114471-18-0DP, Brain Natriuretic Peptide, fragments, lanthionine-containing derivs. **115966-68-2DP**, Histatin-5, fragments, lanthionine-containing derivs. 117978-77-5DP, Gallidermin, fusion peptides 118231-04-2P, Tachyplesin I 120647-41-8DP, CIS-pressin, fragments, lanthionine-containing derivs. 121181-53-1DP, Filgrastim, fragments, lanthionine-containing derivs. 122462-75-3DP, Big Endothelin, fragments, lanthionine-containing derivs. 122984-73-0DP, Corazonin, fragments, lanthionine-containing derivs. 123209-95-0DP, Allatostatin 7 (Diploptera punctata), fragments, lanthionine-containing derivs. 123423-09-6DP, Cerebellin, fragments, lanthionine-containing derivs. 123938-89-6DP, α-Conotoxin, fragments, lanthionine-containing derivs. 124861-55-8DP, TIMP-2, fragments, lanthionine-containing derivs. 125387-34-0DP, Lactocin-S, fusion peptides 125805-20-1DP, LHRH I, fragments, lanthionine-containing derivs. 127830-04-0DP, C-Type Natriuretic peptide, fragments, lanthionine-containing derivs. 128104-18-7DP, Mersacidin, fusion peptides 130391-54-7DP, Exendin-3, fragments, lanthionine-containing derivs. 136212-91-4DP, Dermaseptin, fragments, lanthionine-containing derivs. 137061-46-2DP, Nisin Z, fusion peptides 137061-48-4DP, Pituitary adenylate cyclase activating polypeptide, fragments, lanthionine-containing derivs. 138068-37-8DP, Lepirudin, fragments, lanthionine-containing derivs. 140896-21-5DP, Indolicidin, fragments, lanthionine-containing derivs. 141732-76-5DP, Exendin-4, fragments, lanthionine-containing derivs. 143003-46-7DP, Alglucerase, fragments, lanthionine-containing derivs. 144637-68-3DP, α-Dendrotoxin, fragments, lanthionine-containing derivs.
144940-98-7DP, Guanylin, fragments, lanthionine-containing derivs.
146479-72-3DP, Follitropin beta, fragments, lanthionine-containing derivs.
150671-04-8DP, Ceratotoxin A, fragments, lanthionine-containing derivs.
150952-06-0DP, Salivaricin-A, fusion peptides 152923-57-4DP, Lutropin, fragments, lanthionine-containing derivs. 154248-97-2DP, Imiglucerase, fragments, lanthionine-containing derivs. 154835-90-2DP, Adrenomedullin, fragments, lanthionine-containing derivs. 161172-48-1DP, Epilancin-K7, fusion peptides 165101-51-9DP, Becaplermin, fragments, lanthionine-containing derivs. 180845-52-7DP, Lacticin-481, fusion peptides 185243-69-0DP, Etanercept, fragments, lanthionine-containing derivs.
193830-48-7DP, Urocortin, fragments, lanthionine-containing derivs.
207410-26-2DP, Sublancin 168, fusion peptides 213971-75-6DP, Lacticin 3147 precursor peptide LtnA1 (Lactococcus lactis lactis), fusion peptides 213971-76-7DP, Lacticin 3147 precursor peptide LtnA2 (Lactococcus lactis lactis), fusion peptides 214975-70-9DP, Epicidin-280, fusion peptides 220285-65-4DP, Staphylococcin C55α, fusion peptides 240125-67-1DP, Butyrivibriocin OR 79A, fusion peptides 250582-41-3DP, Mutacin III, fusion peptides 309245-28-1P 338386-18-8DP, Variacin leader peptide, fusion peptides 341006-50-6DP, Plantaricin W β peptide (Lactobacillus plantarum strain LMG 2379, fusion peptides 341006-51-7DP, Plantaricin W .α. peptide (Lactobacillus plantarum strain LMG 2379, fusion peptides 374560-73-3DP, Ruminococcin A, fusion peptides 632287-49-1DP, fusion peptides
RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP

(Preparation)
(secretory manufacture of; use of lantibiotic transport system to secrete foreign proteins into culture medium for purification)
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:931518 HCAPLUS
DOCUMENT NUMBER: 140:689
TITLE: Genes showing altered patterns of expression in response to inhibition of tyrosine kinases and their use in screening kinase inhibitors
INVENTOR(S): Morimoto, Alyssa; Deprimo, Samuel; O'Farrell, Anne-Marie; Smolich, Beverly D.; Manning, William C.; Walter, Sarah A.; Schilling, James Walter, Jr.; Cherrington, Julie
PATENT ASSIGNEE(S): Sugen, Inc., USA
SOURCE: PCT Int. Appl., 408 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2003097854	A2	20031127	WO 2003-US15711		20030519
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
AU 2003233576	A1	20031202	AU 2003-233576		20030519
US 2004018528	A1	20040129	US 2003-440464		20030519
PRIORITY APPLN. INFO.:			US 2002-380872P	P	20020517
			US 2003-448874P	P	20030224
			US 2003-448922P	P	20030224
			WO 2003-US15711	W	20030519

OTHER SOURCE(S): MARPAT 140:689
AB Genes that are regulated by tyrosine kinase-dependent signal transduction pathways are identified as markers for the screening of inhibitors of kinase activity. The change in levels of either the protein or mRNA in a suitable test system may be used to assess the effectiveness of a test compound as an inhibitor of a tyrosine kinase activity. The invention also relates to novel methods, wherein a change in the level of at least one biomarker in a mammal exposed to a compound, compared to the level of the biomarker(s) in a mammal that has not been exposed to the compound, indicates whether the mammal is being exposed to, or is experiencing or will experience a therapeutic or toxic effect in response to, a compound that inhibit tyrosine kinase activity.
IC ICM C12Q
CC 1-1 (Pharmacology)
Section cross-reference(s): 3, 7, 13
IT Blood

Blood analysis
Blood plasma
Bone marrow
Monocyte
Neoplasm
Saliva
Skin
Urine
Urine analysis
(gene expression profiles in; genes showing altered patterns of expression in response to inhibition of tyrosine kinases and their use in screening kinase inhibitors)

IT 627915-55-3 627915-57-5 627915-59-7 627915-61-1 627915-63-3
627915-66-6 627915-68-8 627915-70-2 627915-71-3 627915-72-4
627915-73-5 627915-74-6 627915-75-7 627916-25-0 627916-27-2
627916-29-4 627916-75-0 627916-76-1 627916-77-2 627916-78-3
627916-79-4 627916-80-7 627916-81-8 627916-82-9 627916-83-0
627916-84-1 627916-85-2 627916-86-3 627916-87-4 627916-88-5
627916-89-6 627916-90-9 627916-91-0 627916-92-1 627916-93-2
627916-95-4 627916-97-6 627917-00-4 627917-02-6
627917-04-8 627917-06-0 627917-08-2 627917-10-6 627917-12-8
627917-14-0 627917-16-2 627917-18-4 627917-20-8 627917-23-1
627917-25-3 627917-27-5 627917-29-7 627917-31-1 627917-33-3
627917-35-5
RL: PRP (Properties)
(unclaimed protein sequence; genes showing altered patterns of expression in response to inhibition of tyrosine kinases and their use in screening kinase inhibitors)

L30 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:883777 HCAPLUS
DOCUMENT NUMBER: 141:42750
TITLE: Continuous-release or burst-release of the antimicrobial peptide human lactoferrin 1-11 (hLF1-11) from calcium phosphate **bone** substitutes
AUTHOR(S): Stallmann, Hein P.; Faber, Christopher; Slotema, Eveline T.; Lyaruu, D. M.; Bronckers, Antonius L. J. J.; Amerongen, Arie V. Nieuw; Wuisman, Paul I. J. M.
CORPORATE SOURCE: Department of Orthopaedic Surgery/VU University Medical Center, Amsterdam, 1007 MB, Neth.
SOURCE: Journal of Antimicrobial Chemotherapy (2003), 52(5), 853-855
CODEN: JACHDX; ISSN: 0305-7453
PUBLISHER: Oxford University Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB In order to identify possible drug delivery systems against resistant **bone** infection, we determined the release of the antimicrobial peptide (AMP) human lactoferrin 1-11 (hLF1-11) from com. available **bone** substitutes. We combined six calcium phosphate **cements** and six granule-types with 5 mg/g hLF1-11 and measured its availability and release in vitro from **cements** (7 days) and granules (3 days). The integrity and antimicrobial activity of the hLF1-11 that was released during the first 24 h were measured, using mass spectrometry, and a killing assay on methicillin-resistant Staphylococcus aureus (MRSA). Most of the **cements** showed burst release followed by low-level continuous release, whereas the coated granules showed high burst release for 24 h. After release the peptide was active (in nine of 12 materials) and intact. Different release profiles may be obtained by choosing the

appropriate carrier, which supports the feasibility of biodegradable carriers releasing AMPs against resistant infections.
CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 1
ST antimicrobial lactoferrin hLF111 **artificial bone cement**
IT **Bone**
(**artificial**; continuous-release or burst-release of antimicrobial peptide human lactoferrin 1-11 (hLF1-11) from calcium phosphate **bone** substitutes)
IT Medical goods
(**bone cements**; continuous-release or burst-release of antimicrobial peptide human lactoferrin 1-11 (hLF1-11) from calcium phosphate **bone** substitutes)
IT Antimicrobial agents
Dissolution
(continuous-release or burst-release of antimicrobial peptide human lactoferrin 1-11 (hLF1-11) from calcium phosphate **bone** substitutes)
IT Lactoferrins
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(continuous-release or burst-release of antimicrobial peptide human lactoferrin 1-11 (hLF1-11) from calcium phosphate **bone** substitutes)
IT Drug delivery systems
(granules; continuous-release or burst-release of antimicrobial peptide human lactoferrin 1-11 (hLF1-11) from calcium phosphate **bone** substitutes)
IT 7758-87-4
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Calcibon, Allogran-R, Vitoss; continuous-release or burst-release of antimicrobial peptide human lactoferrin 1-11 (hLF1-11) from calcium phosphate **bone** substitutes)
IT 1338-69-8, Biosorb 60327-90-4, Biofil **183623-03-2** 358644-55-0, Biobon 443694-70-0, Norian SRS 444108-45-6, **Bonesource** 501120-52-1, **Bonesave** 702667-72-9, Bicalphos 720712-63-0, Chronos Inject
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(continuous-release or burst-release of antimicrobial peptide human lactoferrin 1-11 (hLF1-11) from calcium phosphate **bone** substitutes)
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:404367 HCAPLUS
DOCUMENT NUMBER: 140:82103
TITLE: Release of antimicrobial peptide Dhvar-5 from polymethyl methacrylate beads
AUTHOR(S): Faber, C.; Stallmann, H. P.; Lyaruu, D. M.; de Blieck, J. M. A.; Bervoets, Th. J. M.; van Nieuw Amerongen, A.; Wuisman, P. I. J. M.
CORPORATE SOURCE: Department of Orthopaedic Surgery, Vrije Universiteit Medical Center, Amsterdam, Neth.
SOURCE: Journal of Antimicrobial Chemotherapy (2003), 51(6), 1359-1364

CODEN: JACHDX; ISSN: 0305-7453
PUBLISHER: Oxford University Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Osteomyelitis is still a major cause of morbidity and remains a difficult complication to treat in orthopedic surgery. The treatment of choice is a combination of systemic and local antibiotics. The insertion of gentamicin-loaded polymethylmethacrylate (PMMA) beads into the **bone** results in high local concns. of gentamicin and low systemic concns. However, the effectiveness of this treatment is being hampered by the emergence of antimicrobial resistance. New antimicrobial agents are therefore needed. One new class of promising antibiotics is antimicrobial peptides (AMP). Derived from natural human peptides, these have a low tendency to induce antimicrobial resistance. Dhvar-5 is an antimicrobial peptide based on histatin-5, which is found in human saliva and consists of 14 amino acids. It has demonstrated bactericidal activity in vitro. In order to develop a new local treatment using Dhvar-5 for osteomyelitis, we investigated its release from PMMA beads and its antimicrobial activity against a clin. isolate of methicillin-resistant Staphylococcus aureus (MRSA) before and after release from PMMA beads. Specific amts. of Dhvar-5 were incorporated into PMMA mini beads, containing 120, 600 and 1200 μg of Dhvar-5, resp. Dhvar-5 was released from the beads in all three groups. Total release from the 120 μg beads was 9 μg per bead after 7 days. However, the release per bead in the 600 and 1200 μg beads was far more, resp., 416 and 1091 μg over a 28 day period. After release, the Dhvar-5 also retained its antimicrobial activity against MRSA. On the basis of these data we conclude that the amount of Dhvar-5 release from PMMA beads is not proportionate to the amount incorporated; instead, it demonstrated an exponential relationship to the amount of total peptide released. Furthermore, the released peptide remained biol. active against a clin. isolate of MRSA.
CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 1
IT Medical goods
(**bone cements**; release of antimicrobial peptide Dhvar-5 from polymethyl methacrylate beads)
IT **230974-92-2**, Dhvar-5
RL: PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study)
(release of antimicrobial peptide Dhvar-5 from polymethyl methacrylate beads)
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:242121 HCAPLUS
DOCUMENT NUMBER: 138:266934
TITLE: Nucleic acid and polypeptide compositions and methods for the diagnosis and treatment of tumor
INVENTOR(S): Frantz, Gretchen; Hillan, Kenneth J.; Phillips, Heidi S.; Polakis, Paul; Spencer, Susan D.; Williams, P. Mickey; Wu, Thomas D.; Zhang, Zemin
PATENT ASSIGNEE(S): Genentech, Inc., USA
SOURCE: PCT Int. Appl., 285 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 148
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003024392	A2	20030327	WO 2002-US28859	20020911
WO 2003024392	A3	20041021		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
NZ 528704	A	20050225	NZ 1999-528704	19990308
CA 2450824	AA	20000420	CA 1999-2450824	19991005
EP 1466977	A1	20041013	EP 2004-7618	19991202
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
NZ 523206	A	20041224	NZ 2000-523206	20000211
NZ 523207	A	20041224	NZ 2000-523207	20000211
NZ 517395	A	20040130	NZ 2000-517395	20000309
CA 2481685	AA	20010308	CA 2000-2481685	20000824
CA 2481691	AA	20010308	CA 2000-2481691	20000824
CA 2481731	AA	20010308	CA 2000-2481731	20000824
CA 2481756	AA	20010308	CA 2000-2481756	20000824
CA 2481788	AA	20010308	CA 2000-2481788	20000824
US 2002058309	A1	20020516	US 2001-866028	20010525
US 6642360	B2	20031104		
CA 2419541	AA	20020228	CA 2001-2419541	20010530
JP 2004520811	T2	20040715	JP 2002-522282	20010530
EP 1657251	A2	20060517	EP 2005-24036	20010601
EP 1657251	A3	20060524		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, AL, TR				
AU 758921	B2	20030403	AU 2001-57764	20010801
AU 759004	B2	20030403	AU 2001-57765	20010801
CA 2420193	AA	20020228	CA 2001-2420193	20010823
JP 2004520810	T2	20040715	JP 2002-522275	20010823
US 2003073129	A1	20030417	US 2001-946374	20010904
US 2003207803	A1	20031106	US 2001-143026	20011019
US 2003170254	A1	20030911	US 2001-17191	20011024
US 2003199021	A1	20031023	US 2001-13924	20011025
EP 1397383	A2	20040317	EP 2001-990229	20011213
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
AU 772759	B2	20040506	AU 2002-14767	20020201
AU 772723	B2	20040506	AU 2002-14769	20020201
AU 772734	B2	20040506	AU 2002-14771	20020201
AU 778585	B2	20041209	AU 2002-14753	20020201
CA 2449602	AA	20021219	CA 2002-2449602	20020403
WO 2002101069	A2	20021219	WO 2002-US10513	20020403
WO 2002101069	A3	20030904		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,				

UA, UG, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1402260	A2	20040331	EP 2002-731246	20020403	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
JP 2005500030	T2	20050106	JP 2003-503819	20020403	
US 2003148438	A1	20030807	US 2002-145821	20020514	
US 2003170788	A1	20030911	US 2002-145634	20020514	
US 2003166084	A1	20030904	US 2002-146793	20020515	
US 2003134380	A1	20030717	US 2002-147509	20020516	
US 2004214269	A1	20041028	US 2002-147518	20020516	
US 2003180875	A1	20030925	US 2002-147505	20020517	
US 2003199027	A1	20031023	US 2002-152396	20020520	
US 2005074837	A1	20050407	US 2002-158788	20020530	
US 2003068695	A1	20030410	US 2002-192012	20020709	
US 2003068696	A1	20030410	US 2002-192014	20020709	
US 2003049743	A1	20030313	US 2002-194394	20020711	
US 2003049745	A1	20030313	US 2002-194485	20020711	
US 2003064446	A1	20030403	US 2002-194460	20020711	
US 2003153037	A1	20030814	US 2002-194457	20020711	
US 2003059879	A1	20030327	US 2002-194456	20020712	
US 2003064448	A1	20030403	US 2002-194484	20020712	
US 2003049747	A1	20030313	US 2002-195899	20020715	
US 2003064449	A1	20030403	US 2002-195884	20020715	
US 2003063112	A1	20030403	US 2002-195896	20020715	
US 2003068705	A1	20030410	US 2002-195886	20020715	
US 2003068706	A1	20030410	US 2002-195891	20020715	
US 2003071834	A1	20030417	US 2002-195898	20020715	
US 2003049749	A1	20030313	US 2002-196750	20020716	
US 2003065159	A1	20030403	US 2002-196757	20020716	
US 2003068710	A1	20030410	US 2002-196761	20020716	
US 2003104547	A1	20030605	US 2002-197701	20020717	
US 2003104548	A1	20030605	US 2002-197706	20020717	
US 2003207398	A1	20031106	US 2002-198759	20020718	
US 2003215910	A1	20031120	US 2002-199463	20020718	
US 2003180881	A1	20030925	US 2002-202475	20020723	
US 2003064462	A1	20030403	US 2002-206919	20020726	
US 2003064463	A1	20030403	US 2002-206922	20020726	
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US 2003215912	A1	20031120	US 2002-207915	20020729	
US 2004048335	A1	20040311	US 2002-208024	20020729	
CA 2460120	AA	20030327	CA 2002-2460120	20020911	
EP 1487877	A2	20041222	EP 2002-766272	20020911	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,					

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

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US	2003120056	A1	20030626	US 2002-289498	20021105
US	2003144498	A1	20030731	US 2002-289527	20021105
US	2004249141	A1	20041209	US 2002-289490	20021105
US	2003224984	A1	20031204	US 2002-305654	20021126
US	2003199044	A1	20031023	US 2003-410552	20030408
AU	2003248191	A1	20031106	AU 2003-248191	20030919
AU	2003257515	A1	20031120	AU 2003-257515	20031023
AU	2003259607	A1	20031127	AU 2003-259607	20031031
US	2004258710	A1	20041223	US 2004-791618	20040302
US	2004229277	A1	20041118	US 2004-872972	20040621
US	2004242860	A1	20041202	US 2004-872991	20040621
ZA	2004005011	A	20050921	ZA 2004-5011	20040624
US	2005019823	A1	20050127	US 2004-931886	20040831
US	2005064492	A1	20050324	US 2004-948518	20040922
US	2005042216	A1	20050224	US 2004-953264	20040929
US	2005153396	A1	20050714	US 2004-955952	20040929
US	2005226868	A1	20051013	US 2004-964462	20041013
US	2005238650	A1	20051027	US 2004-989826	20041116
US	2005153348	A1	20050714	US 2004-20604	20041221
US	2005226869	A1	20051013	US 2004-20508	20041221
US	2005176041	A1	20050811	US 2004-26279	20041230
US	2005214819	A1	20050929	US 2005-30464	20050105
US	2005164266	A1	20050728	US 2005-36582	20050113
US	2005170396	A1	20050804	US 2005-36869	20050114
US	2005202475	A1	20050915	US 2005-38328	20050118
US	2005176046	A1	20050811	US 2005-46650	20050128
US	2005170458	A1	20050804	US 2005-50154	20050202
US	2005176104	A1	20050811	US 2005-52503	20050204
US	2005136515	A1	20050623	US 2005-56802	20050211
US	2005136475	A1	20050623	US 2005-60652	20050216
US	2005158830	A1	20050721	US 2005-80062	20050314
US	2005214846	A1	20050929	US 2005-117757	20050427
AU	2005205752	A1	20050922	AU 2005-205752	20050831
AU	2005205754	A1	20050922	AU 2005-205754	20050831
AU	2005205755	A1	20050922	AU 2005-205755	20050831
AU	2005205758	A1	20050922	AU 2005-205758	20050831
US	2006160997	A1	20060720	US 2005-248718	20051011

PRIORITY APPLN. INFO.:

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US 1998-97022P	P	19980818
US 1998-97974P	P	19980826
AU 1998-93881	A3	19980914
AU 1998-93178	A3	19981002
US 1998-105169P	P	19981022
US 1998-63561P	P	19981028
US 1998-216021	B1	19981216
US 1998-218517	B1	19981222
US 1999-254311	A1	19990303
AU 1999-30721	A3	19990308
US 1999-131293P	P	19990427
US 1999-149395P	P	19990817
US 1999-380139	A1	19990825
US 1999-151689P	P	19990831
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US 1999-921090	A	19990915
CA 1999-2344465	A3	19991005
AU 2000-17482	A3	19991130
AU 2000-17499	A3	19991202
EP 1999-960644	A3	19991202
US 1999-99309	A	19991220
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CA 2000-2380355	A3	20000824
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US 2001-816920	B1	20010322
WO 2001-US17443	W	20010530
EP 2001-939834	A3	20010601
EP 2004-5726	A3	20010601
US 2001-880457	A	20010612
US 2001-882636	B1	20010614
US 2001-299500P	P	20010620
US 2001-300880P	P	20010625
US 2001-301880P	P	20010629
US 2001-304813P	P	20010711
US 2001-927796	B1	20010809
US 2001-312312P	P	20010813
US 2001-314280P	P	20010822
WO 2001-US26626	W	20010823
US 2001-990711	A1	20011114
US 2001-2796	A	20011115
WO 2001-US48938	W	20011213
US 2002-52586	A1	20020115
US 2002-366869P	P	20020320
WO 2002-US10513	W	20020403
US 2002-123155	A1	20020415
US 2002-373160P	P	20020416
US 2002-125166	A2	20020417
WO 2002-US12206	A	20020417
US 2002-127825	A1	20020422

US 2002-127966	B1	20020423
US 2002-141703	A1	20020508
US 2002-378885P	P	20020508
US 2002-145627	A1	20020514
US 2002-145751	A	20020514
US 2002-146793	A1	20020515
US 2002-177488	A1	20020619
US 2002-197703	B1	20020717
US 2002-197708	A1	20020717
US 2002-199666	A1	20020718
US 2002-199464	B1	20020719
US 2002-211858	A1	20020802
US 2002-405645P	P	20020821
US 2002-241220	A1	20020911
WO 2002-US28859	W	20020911
US 2002-413192P	P	20020923
US 2002-419008P	P	20021015
US 2002-426847P	P	20021115
US 2003-411010	A1	20030410
WO 2003-US11148	A	20030410
US 2003-484959P	P	20030702
US 2003-643795	A1	20030819
WO 2003-US25892	A	20030819
AU 2003-261484	A	20031106
US 2003-712892	A2	20031112
WO 2003-US36298	A	20031113
US 2004-797366	A1	20040309
US 2004-983340	A2	20041105

AB Various cellular polypeptides and their encoding nucleic acids are identified which are expressed to a greater degree on the cell surface by one or more types of cancer cell(s) as compared to on the surface of or by one or more types of normal non-cancer cells. Alternatively, such polypeptides are expressed by cells which produce and/or secrete polypeptides having a potentiating or growth-enhancing effect on cancer cells. Again alternatively, such polypeptides may not be overexpressed by tumor cells as compared to normal cells of the same tissue type, but rather may be specifically expressed by both tumor cells and normal cells of only a single or very limited number of tissue types. All of the above polypeptides are referred to as Tumor-associated Antigenic Target polypeptides ("TAT" polypeptides) and are expected to serve as effective targets for cancer therapy and diagnosis in mammals. Thus, a proprietary database containing gene expression information (GeneExpress, Gene Logic Inc.) was analyzed to identify 60 polypeptides (and their encoding nucleic acids) whose expression is significantly up-regulated in a particular tumor tissue(s) of interest as compared to other tumor(s) and/or normal tissues. Verification and anal. of differential TAT polypeptide expression is achieved by microarray anal. and GEPIS (gene expression profiling in silico).

IC ICM A61K

CC 3-3 (Biochemical Genetics)
Section cross-reference(s): 6, 9, 14, 63

IT **Bone**, neoplasm
Brain, neoplasm
Esophagus, neoplasm
Gallbladder, neoplasm
Gene expression profiles, animal
Human
Kidney, neoplasm
Liver, neoplasm

Lung, neoplasm
Lymphoma
Molecular cloning
Myeloid leukemia
Myoma
Neoplasm
Neuroglia, neoplasm
Pancreas, neoplasm
Prostate gland, neoplasm
Skin, neoplasm
Spleen, neoplasm
Stomach, neoplasm
Thyroid gland, neoplasm
Tumor markers
Urinary system, neoplasm
Uterus, neoplasm
(nucleic acid and polypeptide compns. and methods for the diagnosis and treatment of tumor)

IT 503571-54-8 503571-55-9 503571-56-0 503571-57-1 503571-58-2
503571-59-3 503571-60-6 503571-61-7 503571-62-8 503571-63-9
503571-64-0 503571-65-1 503571-66-2 503571-67-3 503571-68-4
503571-69-5 503571-70-8 503571-71-9 503571-72-0 503571-73-1
503571-74-2 503571-75-3 503571-76-4 503571-77-5
503571-78-6 503571-79-7 503571-80-0 503571-81-1 503571-82-2
503571-83-3 503571-84-4 503571-85-5 503571-86-6 503571-87-7
503571-88-8 503571-89-9 503572-90-2 503572-91-3 503572-92-4
503571-93-5 503571-94-6 503571-95-7 503571-96-8 503571-97-9
503571-98-0 503571-99-1 503572-00-7 503572-01-8 503572-02-9
503572-03-0 503572-04-1 503572-05-2 503572-06-3 503572-07-4
503572-08-5 503572-10-9 503572-12-1 503572-14-3 503572-16-5
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; nucleic acid and polypeptide compns. and methods for the diagnosis and treatment of tumor)

L30 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:591671 HCAPLUS
DOCUMENT NUMBER: 137:145637
TITLE: Novel **bone cement** containing **bone growth factor** and antimicrobial agent
INVENTOR(S): Burger, Elisabeth Henriette
PATENT ASSIGNEE(S): Am-Pharma B.V., Neth.
SOURCE: Eur. Pat. Appl., 17 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1228772	A1	20020807	EP 2001-200363	20010201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
CA 2436420	AA	20020808	CA 2002-2436420	20020129
WO 2002060503	A1	20020808	WO 2002-EP947	20020129
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1359946	A1	20031112	EP 2002-710818	20020129
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004517700	T2	20040617	JP 2002-560694	20020129
US 2004131678	A1	20040708	US 2003-627314	20030725
PRIORITY APPLN. INFO.:			EP 2001-200363 A	20010201
			WO 2002-EP947 W	20020129

AB A water-based **bone** substitute for in vivo implantation, promoting **bone** tissue growth in situ comprises **bone** substitute material, a slow release **bone growth factor** and a fast release antimicrobial agent. Further, a kit and a method for the preparation of the **bone** substitute is disclosed. For example, 1 mg antimicrobial peptide DHVAR-5 (LLLFLLKKRKKRKY, Seq ID No 4) was mixed with 1 g Biobon **cement** powder. The transforming growth factor-β (TGFβ) was suspended in a solution of 0.2% serum albumin in 4 mM HCl, at 1 μg TGFβ/mL solution, forming the first aqueous medium. This suspension was mixed with an equal volume of a second aqueous medium, comprising 4% Na2HPO4. Both first and second media were combined and mixed. One gram of the dry component, DHVAR-5 enriched **cement** powder, was mixed with 0.8 mL of the liquid component, TGFβ enriched **cement** liquid to give a moldable paste that hardens within 5 min. The **bone** substitute obtained comprised 1 mg antimicrobial peptide and 0.4 μg TGFβ per 1 g **cement**.

IC ICM A61L024-00
ICS A61L027-54

CC 63-7 (Pharmaceuticals)

ST **growth factor** antimicrobial peptide **bone cement**

IT **Bone**
(**artificial; bone cement** containing **growth factor** and peptide antimicrobial agent)

IT Proteins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(blood, carriers; **bone cement** containing **growth factor** and peptide antimicrobial agent)

IT Antimicrobial agents
Bone formation
Human
Protein sequences
(**bone cement** containing **growth factor** and peptide antimicrobial agent)

IT **Growth factors, animal**
Peptides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**bone cement** containing **growth factor** and peptide antimicrobial agent)

IT Medical goods
(**bone cements; bone cement** containing **growth factor** and peptide antimicrobial agent)

IT Proteins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(carriers; **bone cement** containing **growth factor** and peptide antimicrobial agent)

IT Dissolution
(of **bone growth factor** and peptide; **bone cement** containing **growth factor** and peptide antimicrobial agent)

IT Osteomyelitis
(prevention of; **bone cement** containing **growth factor** and peptide antimicrobial agent)

IT Albumins, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(serum, carriers; **bone cement** containing **growth factor** and peptide antimicrobial agent)

IT **Transforming growth factors**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(β-; **bone cement** containing **growth factor** and peptide antimicrobial agent)

IT 7558-79-4, Disodium phosphate **155113-11-4 183623-03-2 220126-74-9 223762-50-3 230974-91-1 230974-92-2**, DHVAR-5 **252209-80-6**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**bone cement** containing **growth factor** and peptide antimicrobial agent)

IT 358644-55-0, Biobon
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**cement**; **bone cement** containing **growth factor** and peptide antimicrobial agent)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:34776 HCAPLUS
DOCUMENT NUMBER: 132:113127
TITLE: **Bone cement** with antimicrobial peptides
INVENTOR(S): Burger, Elisabeth Henriette; Van Nieuw Amerongen, Arie; Wuisman, Paulus Ignatius Jozef Maria
PATENT ASSIGNEE(S): Stichting Skeletal Tissue Engineering Group Amsterdam, Neth.
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000001427	A1	20000113	WO 1999-NL417	19990702

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2336030	AA	20000113	CA 1999-2336030	19990702
AU 9948040	A1	20000124	AU 1999-48040	19990702
AU 762262	B2	20030619		
EP 1091774	A1	20010418	EP 1999-931589	19990702
EP 1091774	B1	20021030		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002519155	T2	20020702	JP 2000-557873	19990702
AT 226836	E	20021115	AT 1999-931589	19990702
PT 1091774	T	20030331	PT 1999-931589	19990702
ES 2186377	T3	20030501	ES 1999-931589	19990702
PRIORITY APPLN. INFO.:			EP 1998-202233 A	19980702
			WO 1999-NL417 W	19990702

AB The invention relates to **bone** material for the prevention and treatment of osteomyelitis, which material is provided with antimicrobial peptides (AMPs) consisting of an amino acid chain which contains a domain of 10 to 25 amino acids, wherein the majority of the amino acids of the one half of the domain are pos. charged amino acids and the majority of the amino acids of the other half of the domain are uncharged amino acids, which AMPs can be released to the surrounding area for a period of time and wherein the **bone** material forms **bone cement** after curing and the AMPs are distributed homogeneously in the cured **bone cement.** The invention further relates to a method of manufacturing the **bone** material, wherein the **bone** material is cured to **bone cement** and wherein the AMPs are distributed homogeneously in the cured **bone cement.**

IC ICM A61L024-10
ICS A61L027-22; A61K038-10; A61K038-17

CC 63-7 (Pharmaceuticals)

ST **bone cement** antimicrobial peptide

IT Antibacterial agents
Antimicrobial agents
Osteomyelitis
(**bone cement** with antimicrobial peptides)

IT Peptides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**bone cement** with antimicrobial peptides)

IT Medical goods
(**bone cements; bone cement** with antimicrobial peptides)

IT 14047-56-4 255057-05-7, Chondroitin succinate
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**bone cement** with antimicrobial peptides)

IT 1306-01-0, Tetracalcium phosphate 7757-93-9, Dicalcium phosphate 7758-87-4, Tricalcium phosphate 196711-38-3 196711-39-4 **223762-50-3 230974-91-1 230974-92-2** 233769-42-1 233769-43-2 233769-44-3 233769-45-4
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**bone cement** with antimicrobial peptides)

IT 255057-40-0 **255057-45-5 255057-46-6** 255057-49-9 **255057-51-3**
RL: PRP (Properties)
(unclaimed protein sequence; **bone cement** with antimicrobial peptides)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:10615 HCAPLUS
DOCUMENT NUMBER: 132:60146
TITLE: Cloning and cDNA sequence of human cystatin E, and its diagnostic and therapeutic uses
INVENTOR(S): Ni, Jian; Gentz, Reiner L.; Yu, Guo-Liang; Rosen, Craig A.
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., USA
SOURCE: U.S., 33 pp., Cont.-in-part of U.S. Ser. No. 461,030.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6011012	A	20000104	US 1996-744138	19961105
US 5985601	A	19991116	US 1995-461030	19950605
US 6300477	B1	20011009	US 1999-241376	19990202
US 2002052476	A1	20020502	US 2001-940497	20010829
US 6617132	B2	20030909		

PRIORITY APPLN. INFO.: US 1995-461030 A2 19950605
US 1996-744138 A3 19961105
US 1999-241376 A3 19990202

AB The cDNA sequence and the corresponding deduced amino acid sequence of a protein putatively identified as cystatin E (CysE) based on amino acid sequence homol. are provided. The cDNA was discovered in a cDNA library derived from human primary culture amniotic cells. Is is structurally related to the cystatin II superfamily. It contains an open reading frame encoding a protein of 148 amino acid residues, of which approx. the first 28 amino acid residues are the putative leader sequence. The protein exhibits the highest degree of homol. to human cystatin C. Recombinant techniques for expression of the protein are described, including (1) bacterial expression using the Escherichia coli expression vector pQE-9, (2) expression in COS cells using the pcDNAI/Amp vector, (3) cloning and expression using the baculovirus expression system with the pA2 vector (a modification of the pVL941 vector) in Sf9 cells, and (4) expression via gene therapy with the pMV-7 vector based on the Moloney murine sarcoma virus **backbone**. Also disclosed are methods for utilizing such polypeptides for treating osteoporosis, tumor metastases, microbial infections, viral infection, septic shock, inflammation, retinal irritation, caries, cachexia, and muscle wasting. Also disclosed are diagnostic methods for detecting a mutation in the cystatin E nucleic acid sequences and detecting a level of the soluble form of the protein in a sample derived from a host.

IC ICM C07K014-47
ICS C12N015-12; A61K038-17
INCL 514012000
CC 3-3 (Biochemical Genetics)
Section cross-reference(s): 1, 7, 13
IT 111019-87-5 115682-63-8 118390-82-2 **143298-48-0**
150656-06-7
RL: PRP (Properties)
(unclaimed protein sequence; cloning and cDNA sequence of human cystatin E, and its diagnostic and therapeutic uses)
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:51280 HCAPLUS
DOCUMENT NUMBER: 130:206476
TITLE: NMR studies of the antimicrobial salivary peptides histatin 3 and histatin 5 in aqueous and nonaqueous solutions
AUTHOR(S): Brewer, Dyanne; Hunter, Howard; Lajoie, Gilles
CORPORATE SOURCE: Guelph-Waterloo Centre for Graduate Work Chemistry and Biochemistry, Department of Chemistry, University of Waterloo, Waterloo, ON, N2L 3G1, Can.
SOURCE: Biochemistry and Cell Biology (1998), 76(2/3), 247-256
CODEN: BCBIEQ; ISSN: 0829-8211
PUBLISHER: National Research Council of Canada
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Conformational studies of the salivary peptides histatin 3 (H3) and histatin 5 (H5) were performed by NMR and CD in aqueous and nonaq. solns. Histatin 5 has no defined structure in H2O but adopts a more helical conformation in DMSO and aqueous trifluoroethanol. This is in agreement with the CD anal., which shows no secondary structure in H2O but increasing helical content in the presence of trifluoroethanol. CD anal. shows that H3 has less propensity to form a helical structure than H5 in similar conditions. The NMR anal. of H3 in H2O at pH 7.4 reveals that its conformational mobility is less than that of H5 as indicated by the observation of **backbone** cross peaks αN (i, i + 1) and NN (i, i + 1) and the slow exchanging amide protons in the C-terminus. However, H3 remains essentially unordered as suggested by the lack of longer range nuclear Overhauser effects (NOEs) in the NOESY spectrum. H3 becomes much more ordered in a mixture of 50:50 H2O - DMSO as indicated by the numerous NOEs, including several side chain to side chain and side chain to **backbone** connectivities. Our data suggest that in these conditions H3 contains a turn in the region of K13 to K17 and possibly a 310 helix at the C-terminus. This study demonstrates that H3 and H5 are both conformationally mobile and that each adopts different types of conformations in aqueous and nonaq. solns.
CC 6-3 (General Biochemistry)
IT 115966-67-1, Histatin 3 **115966-68-2**, Histatin 5
RL: PRP (Properties)
(NMR studies of the antimicrobial salivary peptides histatin 3 and histatin 5 in aqueous and nonaq. solns.)
REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:20346 HCAPLUS
DOCUMENT NUMBER: 128:189600
TITLE: Structure of human salivary histatin 5 in aqueous and nonaqueous solutions
AUTHOR(S): Raj, Periathamby Antony; Marcus, Emil; Sukumaran, Dinesh K.
CORPORATE SOURCE: Department of Oral Biology and Periodontal Disease Research Center, State University of New York at Buffalo, Buffalo, NY, 14214, USA
SOURCE: Biopolymers (1998), 45(1), 51-67
CODEN: BIPMAA; ISSN: 0006-3525
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The solution structure of human salivary histatin 5 was examined in water (pH

3.8) and DMSO solns. using 500 MHz homo- and heteronuclear 2-dimensional (2D) NMR. The resonance assignment of peptide **backbone** and side-chain protons was accomplished by 2D total correlated spectroscopy and NOE spectroscopy. The high JNH-CαH values (≥7.4 Hz), absence of any characteristic NH-NH(i, i + 1) or CαH-CβH(i, i + 3) NOE connectivities, high d/dT values (≥0.004 ppm K-1), and the fast 1H/2H amide exchange suggested that histatin 5 mols. remained unstructured in aqueous solution at pH 3.8. In contrast, histatin 5 preferred largely an α-helical conformation in DMSO solution as evident from the JNH-CαH values (≤6.4 Hz), slow 1H/2H exchange, low d/dT values (≤0.003 ppm K-1) observed for amide resonances of residues 6-24, and the characteristic NH-NH(i, i + 1) and CαH-CβH(i, i + 3) NOE connectivities. All **backbone** amide 15N-1H connectivities fell within 6 ppm on the 15N scale in the 2D heteronuclear single quantum correlated spectrum, and the restrained structure calcns. using DIANA suggested the prevalence of α-helical conformations stabilized by 19 (5 → 1) intramol. **backbone** amide H-bonds in polar aprotic medium such as DMSO. The interside-chain H-bonding and salt-bridge type interactions that normally stabilize the helical structure of linear peptides in aqueous solns. were not observed Histatin 5, unlike other naturally occurring antimicrobial polypeptides such as magainins, defensins, and tachyplesins, did not adopt amphiphilic structure, precluding its insertion into microbial membranes and formation of ion channels across membranes. Electrostatic (ionic type) and H-bonding interactions of the pos. charged and polar residues with the head groups of microbial membranes or with a membrane-bound receptor could be the initial step involved in the mechanism of antimicrobial activity of histatins.

CC 6-3 (General Biochemistry)

IT **115966-68-2**, Histatin 5
RL: PRP (Properties)
(NMR study of structure of human salivary histatin 5 in aqueous and nonaq. solns.)

REFERENCE COUNT: 75 THERE ARE 75 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:969749 HCAPLUS
DOCUMENT NUMBER: 123:350366
TITLE: Pharmaceutical compositions containing cell **growth factor** and histatin for **bone** disease
INVENTOR(S): Taniguchi, Shinjiro; Takemura, Akane; Matsuda, Naoki; Tsunemitsu, Akira
PATENT ASSIGNEE(S): Sunstar Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07258110	A2	19951009	JP 1994-76628	19940322

PRIORITY APPLN. INFO.: JP 1994-76628 19940322

AB Pharmaceutical compns. for **bone** disease (such fracture) contain epidermal growth factor and histatin, preferably histatin-5. An injection contained epidermal growth factor 1, histatin-5 200, NaCl 900mg and

injection water to 100mL. The prepns. were effective and stable.
IC ICM A61K038-22
ICS A61K038-00
CC 63-6 (Pharmaceuticals)
ST cell **growth factor** histatin **bone** disease
IT **Bone**, disease
(pharmaceutical compns. containing cell **growth factor** and histatin for **bone** disease)
IT **Bone**, disease
(fracture, pharmaceutical compns. containing cell **growth factor** and histatin for **bone** disease)
IT Pharmaceutical dosage forms
(injections, pharmaceutical compns. containing cell **growth factor** and histatin for **bone** disease)
IT Pharmaceutical dosage forms
(ointments, pharmaceutical compns. containing cell **growth factor** and histatin for **bone** disease)
IT **62229-50-9**, Epidermal growth factor **115966-68-2**, Histatin 5 123781-17-9, Histatin
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. containing cell **growth factor** and histatin for **bone** disease)

L30 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:317997 HCAPLUS
DOCUMENT NUMBER: 120:317997
TITLE: Membrane-induced helical conformation of an active candidacidal fragment of salivary histatins
AUTHOR(S): Raj, Periathamby Antony; Soni, Sunil Datta; Levine, Michael J.
CORPORATE SOURCE: Dep. Oral Biol., State Univ. New York, Buffalo, NY, 14214, USA
SOURCE: Journal of Biological Chemistry (1994), 269(13), 9610-19
CODEN: JBCHA3; ISSN: 0021-9258
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The conformational preference of the candidacidal C-terminal 16-residue fragment (9-24; GYKRKFHEKHHSHRGY) of salivary histatin 5 was examined in H2O, MeOH, and DMSO solns. using 500 MHz 2-dimensional-NMR. Fourier transform IR and CD spectroscopy were used to delineate its membrane-bound conformation in lipid vesicles. The peptide **backbone** and side-chain proton resonance assignments were accomplished by 2-dimensional total correlated and nuclear Overhauser effect (NOE) spectra. The coupling constant (JNH-CαH) values determined from the double quantum-filtered correlated spectra, temperature coeffs. of NH chemical shifts (dδ/dT), 1H/2H exchange rates on amide resonances, and the set of NOE connectivities were used to delineate **backbone** conformational features. The high JNH-CαH values (≥7.4 Hz), absence of any characteristic NH-NH (i, i+1) or CαH-CβH (i,i+3) NOE connectivities, high dδ/dT values (≥0.004), and the fast 1H/2H amide exchange suggest that the histatin peptide favors unfolded random conformations in aqueous solution at pH 3.8. In contrast, the JNH-CαH values (≤6.5 Hz), slow 1H/2H exchange, low dδ/dT values (≤0.003) observed for amide resonances of residues 5-16, and the characteristic NH-NH (i,i+1), CαH-CβH (i,i+3) NOE connectivities, provide evidence for the presence of largely α-helical conformations in DMSO, which mimics the polar aprotic membrane environment. In methanolic solns., 310-helical conformations

could exist as a minor population together with the major α-helical conformations. Fourier transform IR spectroscopy and CD data indicate that lipid environments such as dimyristoylphosphatidylcholine vesicles could induce the peptide to fold into predominantly α-helical conformation. The results suggest that in DMSO and dimyristoylphosphatidylcholine vesicles the candidacidal domain of salivary histatin 5 prefers a largely helical conformation, which could facilitate its interaction with the membrane of Candida albicans. The mechanism of antimicrobial action of this class of polypeptides appears to involve primarily electrostatic and hydrogen-bonding interaction of cationic and polar residues with the head groups of the plasma membranes of target cells.

CC 6-3 (General Biochemistry)
Section cross-reference(s): 10

IT **115966-68-2**, Histatin 5
RL: BIOL (Biological study)
(membrane-induced helical conformation of C-terminal peptide of, candidacidal activity in relation to)

IT **132796-31-7**
RL: PRP (Properties)
(membrane-induced helical conformation of, candidacidal activity in relation to)

L30 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:608575 HCAPLUS
DOCUMENT NUMBER: 115:208575
TITLE: Synthesis and biological activity of histidine-rich peptides bonded to polylysine **backbone**
AUTHOR(S): Chang, Conway C.; Pollock, Jerry J.; Hong, Anita L.
CORPORATE SOURCE: Appl. Biosyst. Inc., Foster City, CA, 94404, USA
SOURCE: Pept. 1990, Proc. Eur. Pept. Symp., 21st (1991), Meeting Date 1990, 843-6. Editor(s): Giralt, Ernest; Andreu, David. ESCOM Sci. Publ.: Leiden, Neth. CODEN: 57HNAI
DOCUMENT TYPE: Conference
LANGUAGE: English
GI

H-X-Lys-Arg-His-His-Gly-Tyr-Lys-
Arg-Lys-Phe-His-Glu-Lys-His-His-
Ser-His-Arg-Gly-Tyr-OH

I, X=null
II, X=Asp-Ser-His-Ala

AB A symposium report on the synthesis of histidine-rich peptides HRP-5 (I) and HRP-6 (II) bonded to an 8-branched lysine **backbone**. The antifungal activity against Candida albicans by the lysine-complexed HRP-5 and HRP-6 was compared to that of the uncomplexed peptides.

CC 34-3 (Amino Acids, Peptides, and Proteins)

ST histidine peptide polylysine **backbone** symposium; lysine polymer histidine peptide symposium; antifungal histidine peptide polylysine symposium

IT Fungicides and Fungistats
(histidine-rich peptides bound to polylysine **backbone**)

IT 71-00-1DP, Histidine, peptides containing, polylysine-bound 25104-18-1DP, Lysine homopolymer, histidine-rich peptides bound to **117233-32-6DP**, polylysine-bound **136843-45-3DP**, HRP 6, polylysine-bound

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and antifungal activity of)